

Name _____

List all numbers from the given set B that are members of the given Real Number subset.

1) $B = \{1, \sqrt{7}, -18, 0, 0.\overline{4}, \sqrt{9}\}$ Integers 1) _____

2) $B = \{4, \sqrt{8}, -6, 0, 0.\overline{7}, \sqrt{9}\}$ Integers 2) _____

3) $B = \{17, \sqrt{5}, -19, 0, 0.\overline{5}, \sqrt{25}\}$ Whole numbers 3) _____

4) $B = \{16, \sqrt{7}, -23, 0, 0.\overline{8}, \sqrt{9}\}$ Whole numbers 4) _____

5) $B = \{7, \sqrt{7}, -15, 0, 0.\overline{6}, \sqrt{4}\}$ Natural numbers 5) _____

6) $B = \{2, \sqrt{5}, -15, 0, 0.\overline{8}, \sqrt{4}\}$ Natural numbers 6) _____

7) $B = \{10, \sqrt{5}, -13, 0, \frac{1}{2}, \sqrt{9}, 0.\overline{5}, 0.71\}$ Rational numbers 7) _____

8) $B = \{20, \sqrt{6}, -11, 0, \frac{3}{4}, \sqrt{9}, 0.\bar{6}, 0.49\}$ Rational numbers

8) _____

9) $B = \{19, \sqrt{7}, 0, \frac{7}{8}, \sqrt{16}, -0.\bar{2}, 0.4, -3\}$ Real numbers

9) _____

10) $B = \{1, \sqrt{6}, 0, \frac{4}{5}, \sqrt{25}, -0.\bar{4}, 0.74, -17\}$ Real numbers

10) _____

Evaluate the exponential expression.

11) $(-7)^3$

11) _____

12) $(-4)^3$

12) _____

13) -4^3

13) _____

14) -6^2

14) _____

15) 5^0

15) _____

16) 3^0

16) _____

17) $(-7)^0$

17) _____

18) $(-5)^0$

18) _____

19) -2^0

19) _____

20) -3^0

20) _____

21) 4^{-3}

21) _____

22) 4^{-2}

22) _____

23) $(-4)^{-2}$

23) _____

24) $(-3)^{-4}$

24) _____

25) -4^{-3}

25) _____

26) -5^{-2}

26) _____

Simplify the exponential expression.

27) $(-5x^5y^{-6})(3x^{-1}y)$

27) _____

28) $(-4x^4y^{-5})(2x^{-1}y)$

28) _____

29) $\frac{3^{-6}x^{-5}y^4}{3^{-3}x^{-8}y^8}$

29) _____

30) $\frac{5^{-8}x^{-2}y^3}{5^{-5}x^{-5}y^6}$

30) _____

31) $\left(\frac{xy^3}{x^6y}\right)^{-2}$

31) _____

32) $\left(\frac{xy^4}{x^5y}\right)^{-2}$

32) _____

33) $\left(\frac{8x^{-4}y^{-3}z^4}{2xy^{-3}z^{-4}}\right)^{-1}$

33) _____

34) $\left(\frac{8x^{-3}y^{-2}z^3}{2xy^{-2}z^{-3}}\right)^{-1}$

34) _____

Write the number in decimal notation without the use of exponents.

35) 2.24×10^5

35) _____

36) 1.55×10^6

36) _____

37) 2.303×10^{-6}

37) _____

38) 1.645×10^{-6}

38) _____

39) -1.6809×10^6

39) _____

40) -1.5454×10^6

40) _____

Write the number in scientific notation.

41) 610,000

41) _____

42) 11,000

42) _____

43) 2,466,030

43) _____

44) 386,691

44) _____

45) 0.00005069

45) _____

46) 0.00006775

46) _____

Perform the indicated computation. Write the answer in scientific notation.

47) $(5 \times 10^{-1})(5.5 \times 10^4)$

47) _____

48) $(9 \times 10^4)(3.1 \times 10^6)$

48) _____

49) $(4 \times 10^{-1})(1.1 \times 10^6)$

49) _____

50) $(3 \times 10^{-9})(2.6 \times 10^{-6})$

50) _____

51) $\frac{15 \times 10^{-1}}{3 \times 10^{-4}}$

51) _____

52) $\frac{8 \times 10^1}{4 \times 10^{-7}}$

52) _____

53) $\frac{14.56 \times 10^1}{4 \times 10^{-5}}$

53) _____

54) $\frac{9.2 \times 10^6}{4 \times 10^{-7}}$

54) _____

55) $\frac{10.34 \times 10^7}{2.2 \times 10^{-9}}$

55) _____

56) $\frac{11.84 \times 10^{-4}}{3.2 \times 10^{-8}}$

56) _____

Rationalize the denominator.

57) $\frac{1}{\sqrt{29}}$

57) _____

58) $\frac{1}{\sqrt{13}}$

58) _____

59) $\frac{\sqrt{144}}{\sqrt{11}}$

59) _____

60) $\frac{\sqrt{121}}{\sqrt{10}}$

60) _____

61) $\frac{4}{9 - \sqrt{2}}$

61) _____

62) $\frac{5}{7 - \sqrt{3}}$

62) _____

63) $\frac{\sqrt{3}}{\sqrt{13} + 2}$

63) _____

64) $\frac{\sqrt{6}}{\sqrt{17} + 3}$

64) _____

65) $\frac{5}{\sqrt{10} + \sqrt{15}}$

65) _____

66) $\frac{3}{\sqrt{2} + \sqrt{5}}$

66) _____

Simplify using properties of exponents.

67) $\frac{12x^{3/2}}{6x^{1/3}}$

67) _____

68) $\frac{48x^{3/4}}{6x^{1/3}}$

68) _____

$$69) (9x^4y^8)^{1/2}$$

69) _____

$$70) (36x^{10}y^{10})^{1/2}$$

70) _____

Solve the rational equation.

$$71) \frac{1}{x-1} = \frac{2}{x^2-1}$$

71) _____

$$72) \frac{1}{x-9} = \frac{18}{x^2-81}$$

72) _____

$$73) \frac{x+9}{x+3} = \frac{6}{x+3}$$

73) _____

$$74) \frac{x+5}{x+1} = \frac{4}{x+1}$$

74) _____

$$75) 1 + \frac{1}{x} = \frac{72}{x^2}$$

75) _____

$$76) 1 + \frac{1}{x} = \frac{6}{x^2}$$

76) _____

$$77) \frac{1}{x} + \frac{1}{x+3} = \frac{x+4}{x+3}$$

77) _____

$$78) \frac{1}{x} + \frac{1}{x+4} = \frac{x+5}{x+4}$$

78) _____

$$79) \frac{3x}{x+5} - \frac{15}{x-5} = \frac{3x^2+75}{x^2-25}$$

79) _____

$$80) \frac{6x}{x+3} - \frac{18}{x-3} = \frac{6x^2+54}{x^2-9}$$

80) _____

$$81) \frac{x+6}{x^2-7x+10} - \frac{6}{x^2-4x+4} = \frac{x-6}{x^2-7x+10}$$

81) _____

$$82) \frac{x+4}{x^2-2x-15} - \frac{4}{x^2-10x+25} = \frac{x-4}{x^2-2x-15}$$

82) _____

Solve or simplify, whichever is appropriate.

$$83) \frac{2}{x+5} - \frac{1}{x-5} = \frac{10}{x^2-25}$$

83) _____

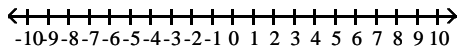
$$84) \frac{2}{x+6} - \frac{1}{x-6} = \frac{12}{x^2-36}$$

84) _____

Express the interval in set-builder notation and graph the interval on a number line.

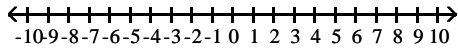
85) $(-8, 8]$

85) _____



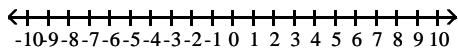
86) $[-3, 4)$

86) _____



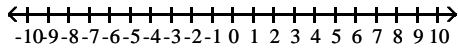
87) $\left(-\infty, \frac{9}{4}\right)$

87) _____



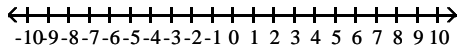
88) $[-8, 6]$

88) _____



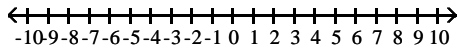
89) $(-6, \infty)$

89) _____

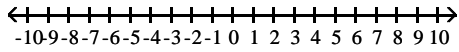


90) $[4, \infty)$

90) _____



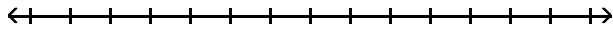
91) $(-\infty, 3.5]$



91) _____

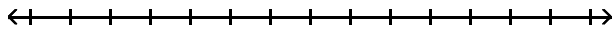
State the solution set of the inequality in interval notation and sketch its graph.

92) $3x + 5 > 2x + 12$



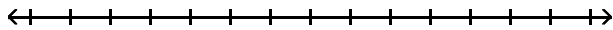
92) _____

93) $6x + 2 > 5x - 2$



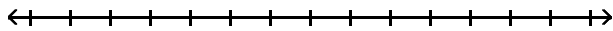
93) _____

94) $5x + 5 \geq 4x - 1$



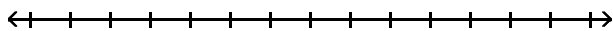
94) _____

95) $-3x + 1 \geq -4x - 2$



95) _____

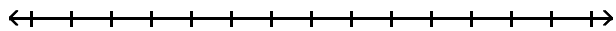
96) $12x - 6 > 2(5x + 4)$



96) _____

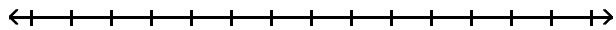
97) $30x - 30 > 6(4x + 2)$

97) _____



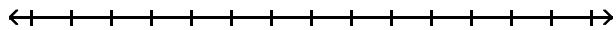
98) $-12x + 8 \leq -2(5x - 10)$

98) _____



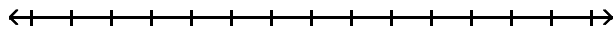
99) $-10x - 4 \leq -2(4x - 3)$

99) _____



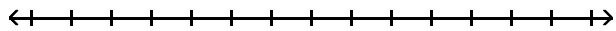
100) $5 \leq 3x - 1 \leq 14$

100) _____



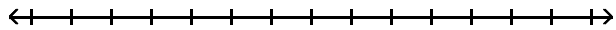
101) $17 \leq 3x + 5 \leq 23$

101) _____



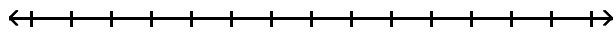
102) $-30 \leq -5x - 5 < -20$

102) _____



103) $-25 \leq -4x - 5 < -21$

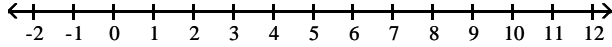
103) _____



Solve the compound inequality. Other than \emptyset , use interval notation to express the solution set and graph the solution set on a number line.

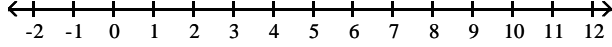
104) $20 < 5x \leq 30$

104) _____



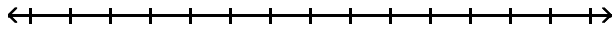
105) $15 < 5x \leq 25$

105) _____



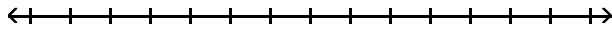
106) $-25 \leq -4x + 3 \leq -5$

106) _____



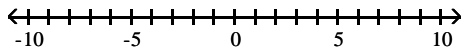
107) $-12 \leq -3x + 3 \leq -3$

107) _____



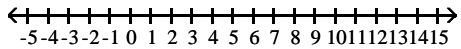
108) $-4 \leq -4x - 12 < 4$

108) _____



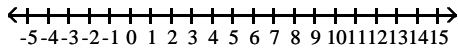
109) $1 \leq \frac{3}{4}x - 2 < 7$

109) _____



110) $-3 \leq \frac{2}{3}x - 5 < 3$

110) _____



Solve the problem.

111) On the first four exams, your grades are 75, 85, 64, and 76. You are hoping to earn a C in the course. This will occur if the average of your five exam grades is greater than or equal to 70 and less than 80. What range of grades on the fifth exam will result in earning a C? 111) _____

112) On the first four exams, your grades are 77, 85, 68, and 78. You are hoping to earn a C in the course. This will occur if the average of your five exam grades is greater than or equal to 70 and less than 80. What range of grades on the fifth exam will result in earning a C? 112) _____

113) On the first four exams, your grades are 78, 82, 73, and 79. There is still a final exam, and it counts as two grades. You are hoping to earn a C in the course. This will occur if the average of your six exam grades is greater than or equal to 70 and less than 80. What range of grades on the final exam will result in earning a C? 113) _____

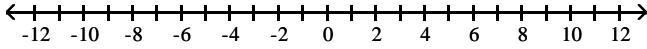
114) On the first four exams, your grades are 77, 81, 72, and 78. There is still a final exam, and it counts as two grades. You are hoping to earn a C in the course. This will occur if the average of your six exam grades is greater than or equal to 70 and less than 80. What range of grades on the final exam will result in earning a C? 114) _____

115) The formula $C = 0.5x + 18$ represents the estimated future cost of yearly attendance at State University, where C is the cost in thousands of dollars x years after 2002. Use a compound inequality to determine when the attendance costs will range from 20.5 to 22.5 thousand dollars. 115) _____

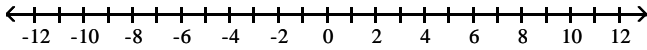
116) The formula $C = 1.5x + 17$ represents the estimated future cost of yearly attendance at State University, where C is the cost in thousands of dollars x years after 2002. Use a compound inequality to determine when the attendance costs will range from 29 to 35 thousand dollars. 116) _____

Solve the absolute value inequality. Other than \emptyset , use interval notation to express the solution set and graph the solution set on a number line.

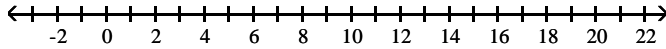
117) $|x - 4| \geq 0$ 117) _____



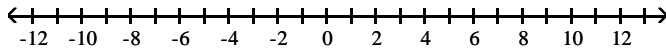
118) $|x + 7| \geq 0$ 118) _____



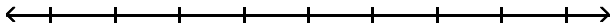
119) $|x - 4| < 6$ 119) _____



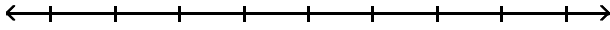
120) $|x + 7| < 4$ 120) _____



121) $|x + 3| - 2 \leq 4$ 121) _____

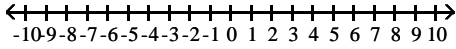


122) $|x + 6| + 1 \leq 4$



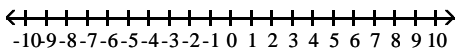
122) _____

123) $|3(x + 1) + 6| \leq 9$



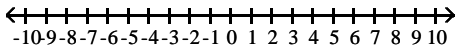
123) _____

124) $|2(x + 1) + 6| \leq 10$



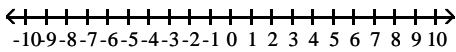
124) _____

125) $\left| \frac{9y + 18}{2} \right| < 9$



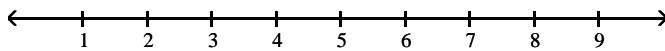
125) _____

126) $\left| \frac{11y + 44}{4} \right| < 11$



126) _____

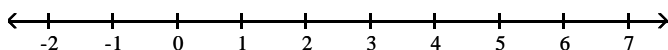
127) $|5x - 5| + 4 < 0$



127) _____

128) $|4x + 7| + 1 < -1$

128) _____



Solve the problem.

129) A spinner has five regions numbered 1 through 5. If the spinner is spun 100 times, we would expect about 20 of the outcomes to be Region 1. It can be determined that the spinner is unbalanced if x , the number of outcomes that result in Region 1, satisfies

129) _____

$\left| \frac{x - 20}{4} \right| \geq 1.645$. Describe the number of outcomes that determine an unbalanced spinner that is spun 100 times.

130) When a number is subtracted from -7 , the absolute value of the difference is more than 3. Use interval notation to express the set of all numbers that satisfy this condition.

130) _____

131) A landscaping company sells 40-pound bags of top soil. The actual weight x of a bag, however, may differ from the advertised weight by as much as 0.75 pound. Write an inequality involving absolute value that expresses the relationship between the actual weight x of a bag and 40 pounds. Solve the inequality, and express the answer in interval form.

131) _____

Solve the equation.

132) $x^{2/3} = -5x^{1/3}$

132) _____

133) $x^{2/3} = -4x^{1/3}$

133) _____

134) $x^{1/2} = 4x^{1/4}$

134) _____

$$135) x^{1/2} = 2x^{1/4}$$

135) _____

$$136) x^{1/2} = -4x^{1/4}$$

136) _____

$$137) x^{1/2} = -3x^{1/4}$$

137) _____

$$138) (x - 10)^{2/5} = (9x)^{1/5}$$

138) _____

$$139) (x - 8)^{2/5} = (4x)^{1/5}$$

139) _____

$$140) 6x^{2/5} + 15x^{1/5} + 9 = 0$$

140) _____

$$141) 6x^{2/5} + 8x^{1/5} + 2 = 0$$

141) _____

$$142) (x + 3)^{2/3} - 7(x + 3)^{1/3} + 12 = 0$$

142) _____

$$143) (x + 5)^{2/3} + 3(x + 5)^{1/3} - 10 = 0$$

143) _____

$$144) 25x^4 - 61x^2 + 36 = 0$$

144) _____

$$145) 16x^4 - 41x^2 + 25 = 0$$

145) _____

$$146) x^4 + 2000 = 141x^2$$

146) _____

$$147) x^4 + 1200 = 91x^2$$

147) _____

$$148) (3x + 2)^2 - 11(3x + 2) + 28 = 0$$

148) _____

$$149) (3x - 3)^2 - 7(3x - 3) + 10 = 0$$

149) _____

$$150) (5x - 7)^2 = 6(5x - 7) - 8$$

150) _____

$$151) (-9x + 1)^2 = -3(-9x + 1) + 54$$

151) _____

$$152) (x + 1)^4 - 5(x + 1)^2 + 4 = 0$$

152) _____

$$153) (x + 3)^4 - 5(x + 3)^2 + 4 = 0$$

153) _____

$$154) 4x^{-2} - 6x^{-1} + 2 = 0$$

154) _____

$$155) 7x^{-2} - 9x^{-1} - 10 = 0$$

155) _____

$$156) 56x^{-2} + 45x^{-1} = 50$$

156) _____

$$157) 18x^{-2} + 3x^{-1} = 28$$

157) _____

$$158) 20x^{-2/5} + 22x^{-1/5} + 6 = 0$$

158) _____

$$159) 10x^{-2/5} + 16x^{-1/5} + 6 = 0$$

159) _____

$$160) \sqrt{x} - 9 = 0$$

160) _____

$$161) \sqrt{x} - 8 = 0$$

161) _____

$$162) \sqrt{x+3} = 3$$

162) _____

$$163) \sqrt{x+5} = 7$$

163) _____

$$164) \sqrt{x-6} + 2 = 5$$

164) _____

$$165) \sqrt{x-5} + 3 = 4$$

165) _____

$$166) \sqrt{8x-3} = \sqrt{x+9}$$

166) _____

$$167) \sqrt{12x-3} = \sqrt{x+5}$$

167) _____

$$168) \sqrt{2x+9} = x+5$$

168) _____

$$169) \sqrt{2x+10} = x+6$$

169) _____

$$170) \sqrt{x-3} = x-5$$

170) _____

$$171) \sqrt{x+3} = \sqrt{x+21}$$

171) _____

$$172) \sqrt{x+1} = \sqrt{x+5}$$

172) _____

$$173) \sqrt{x-1} = \sqrt{x-5}$$

173) _____

$$174) \sqrt{x-1} = \sqrt{x-9}$$

174) _____

$$175) \sqrt{x} - 1 = \sqrt{x + 7}$$

175) _____

$$176) \sqrt{x} - 2 = \sqrt{x + 32}$$

176) _____

Factor completely.

$$177) x^3 - 8$$

177) _____

$$178) t^3 + 343$$

178) _____

$$179) t^3 + 729$$

179) _____

$$180) 125 - t^3$$

180) _____

$$181) x^4 - \frac{x}{27}$$

181) _____

$$182) x^4 - \frac{x}{216}$$

182) _____

Answer Key

Testname: E1PREP1.1TO1.8V02

- 1) $1, -18, 0, \sqrt{9}$
- 2) $4, -6, 0, \sqrt{9}$
- 3) $17, 0, \sqrt{25}$
- 4) $16, 0, \sqrt{9}$
- 5) $7, \sqrt{4}$
- 6) $2, \sqrt{4}$
- 7) $10, -13, 0, \frac{1}{2}, \sqrt{9}, 0.71, 0.\bar{5}$
- 8) $20, -11, 0, \frac{3}{4}, \sqrt{9}, 0.49, 0.\bar{6}$
- 9) $19, \sqrt{7}, 0, \frac{7}{8}, \sqrt{16}, -0.\bar{2}, 0.4, -3$
- 10) $1, \sqrt{6}, 0, \frac{4}{5}, \sqrt{25}, -0.\bar{4}, 0.74, -17$
- 11) -343
- 12) -64
- 13) -64
- 14) -36
- 15) 1
- 16) 1
- 17) 1
- 18) 1
- 19) -1
- 20) -1
- 21) $\frac{1}{64}$
- 22) $\frac{1}{16}$
- 23) $\frac{1}{16}$
- 24) $\frac{1}{81}$
- 25) $-\frac{1}{64}$
- 26) $-\frac{1}{25}$
- 27) $\frac{-15x^4}{y^5}$
- 28) $\frac{-8x^3}{y^4}$
- 29) $\frac{x^3}{27y^4}$
- 30) $\frac{x^3}{125y^3}$

Answer Key

Testname: E1PREP1.1TO1.8V02

31) $\frac{x^{10}}{y^4}$

32) $\frac{x^8}{y^6}$

33) $\frac{x^5}{4z^8}$

34) $\frac{x^4}{4z^6}$

35) 224,000

36) 1,550,000

37) 0.000002303

38) 0.000001645

39) -1,680,900

40) -1,545,400

41) 6.1×10^5

42) 1.1×10^4

43) 2.46603×10^6

44) 3.86691×10^5

45) 5.069×10^{-5}

46) 6.775×10^{-5}

47) 2.75×10^4

48) 2.79×10^{11}

49) 4.4×10^5

50) 7.8×10^{-15}

51) 5×10^3

52) 2×10^8

53) 3.64×10^6

54) 2.30×10^{13}

55) 4.7×10^{16}

56) 3.7×10^4

57) $\frac{\sqrt{29}}{29}$

58) $\frac{\sqrt{13}}{13}$

59) $\frac{12\sqrt{11}}{11}$

60) $\frac{11\sqrt{10}}{10}$

61) $\frac{36 + 4\sqrt{2}}{79}$

62) $\frac{35 + 5\sqrt{3}}{46}$

Answer Key

Testname: E1PREP1.1TO1.8V02

63) $\frac{\sqrt{39} - 2\sqrt{3}}{9}$

64) $\frac{\sqrt{102} - 3\sqrt{6}}{8}$

65) $\sqrt{15} - \sqrt{10}$

66) $\sqrt{5} - \sqrt{2}$

67) $2x^{7/6}$

68) $8x^{5/12}$

69) $3x^2y^4$

70) $6x^5y^5$

71) \emptyset

72) \emptyset

73) \emptyset

74) \emptyset

75) $\{-9, 8\}$

76) $\{-3, 2\}$

77) $\{1\}$

78) $\{1\}$

79) \emptyset

80) \emptyset

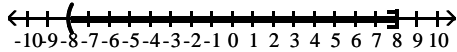
81) $\{-1\}$

82) $\{13\}$

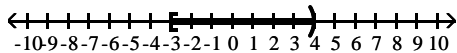
83) $\{25\}$

84) $\{30\}$

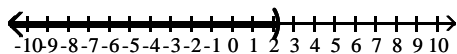
85) $\{x \mid -8 < x \leq 8\}$



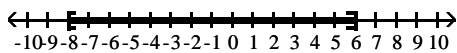
86) $\{x \mid -3 \leq x < 4\}$



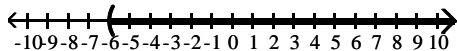
87) $\left\{x \mid x < \frac{9}{4}\right\}$



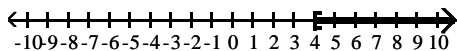
88) $\{x \mid -8 \leq x \leq 6\}$



89) $\{x \mid x > -6\}$



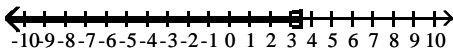
90) $\{x \mid x \geq 4\}$



Answer Key

Testname: E1PREP1.1TO1.8V02

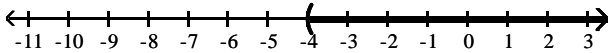
91) $\{x \mid x \leq 3.5\}$



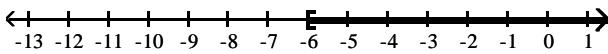
92) $(7, \infty)$



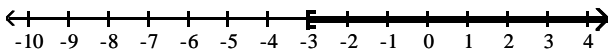
93) $(-4, \infty)$



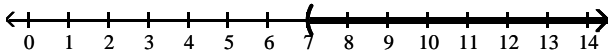
94) $[-6, \infty)$



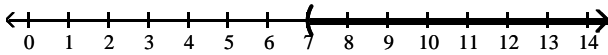
95) $[-3, \infty)$



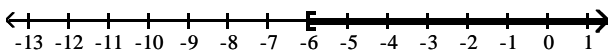
96) $(7, \infty)$



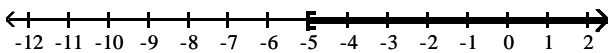
97) $(7, \infty)$



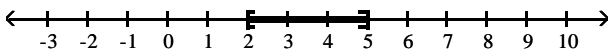
98) $[-6, \infty)$



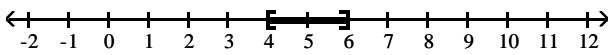
99) $[-5, \infty)$



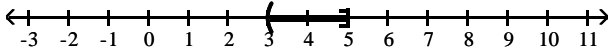
100) $[2, 5]$



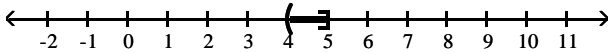
101) $[4, 6]$



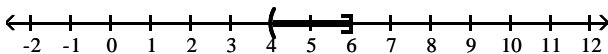
102) $(3, 5]$



103) $(4, 5]$



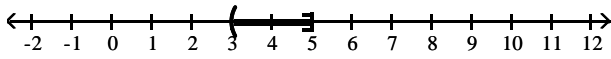
104) $(4, 6]$



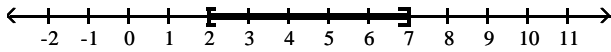
Answer Key

Testname: E1PREP1.1TO1.8V02

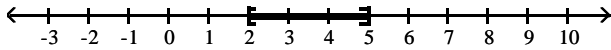
105) (3, 5]



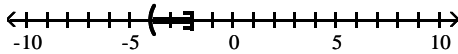
106) [2, 7]



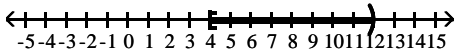
107) [2, 5]



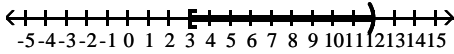
108) (-4, -2]



109) [4, 12)



110) [3, 12)



111) [50, 100)

112) [42, 92)

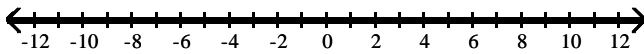
113) [54, 84)

114) [56, 86)

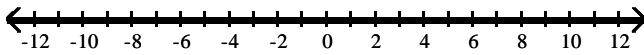
115) From 2007 to 2011

116) From 2010 to 2014

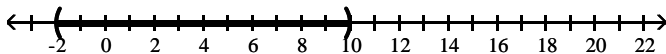
117) $(-\infty, \infty)$



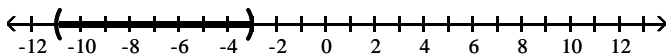
118) $(-\infty, \infty)$



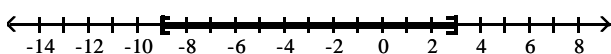
119) (-2, 10)



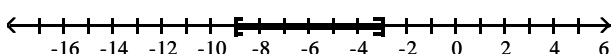
120) (-11, -3)



121) [-9, 3]



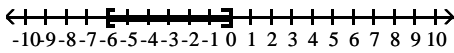
122) [-9, -3]



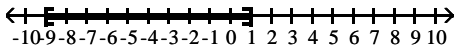
Answer Key

Testname: E1PREP1.1TO1.8V02

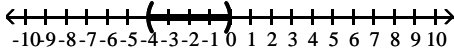
123) $[-6, 0]$



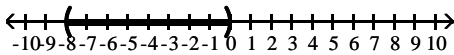
124) $[-9, 1]$



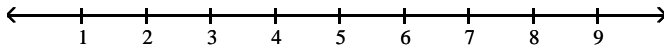
125) $(-4, 0)$



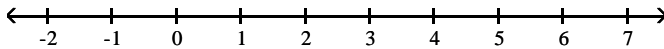
126) $(-8, 0)$



127) \emptyset



128) \emptyset



129) Fewer than 14 or more than 26 outcomes

130) $(-\infty, -10) \cup (-4, \infty)$

131) $|40 - x| \leq 0.75$; $[39.25, 40.75]$

132) $\{0, -125\}$

133) $\{0, -64\}$

134) $\{0, 256\}$

135) $\{0, 16\}$

136) \emptyset

137) \emptyset

138) $\{4, 25\}$

139) $\{4, 16\}$

140) $\left\{-\frac{243}{32}, -1\right\}$

141) $\left\{-\frac{1}{243}, -1\right\}$

142) $\{24, 61\}$

143) $\{-130, 3\}$

144) $\left\{-\frac{6}{5}, -1, 1, \frac{6}{5}\right\}$

145) $\left\{-\frac{5}{4}, -1, 1, \frac{5}{4}\right\}$

146) $\{-5\sqrt{5}, -4, 4, 5\sqrt{5}\}$

147) $\{-5\sqrt{3}, -4, 4, 5\sqrt{3}\}$

148) $\left\{\frac{5}{3}, \frac{2}{3}\right\}$

149) $\left\{\frac{8}{3}, \frac{5}{3}\right\}$

Answer Key

Testname: E1PREP1.1TO1.8V02

150) $\left\{\frac{9}{5}, \frac{11}{5}\right\}$

151) $\left\{-\frac{5}{9}, \frac{10}{9}\right\}$

152) $\{-3, -2, 0, 1\}$

153) $\{-5, -4, -2, -1\}$

154) $\{2, 1\}$

155) $\left\{-\frac{7}{5}, \frac{1}{2}\right\}$

156) $\left\{\frac{8}{5}, -\frac{7}{10}\right\}$

157) $\left\{\frac{6}{7}, -\frac{3}{4}\right\}$

158) $\left\{-\frac{3125}{243}, -32\right\}$

159) $\left\{-\frac{3125}{243}, -1\right\}$

160) $\{81\}$

161) $\{64\}$

162) $\{6\}$

163) $\{44\}$

164) $\{15\}$

165) $\{6\}$

166) $\left\{\frac{12}{7}\right\}$

167) $\left\{\frac{8}{11}\right\}$

168) $\{8\}$

169) $\{8\}$

170) $\{7\}$

171) $\{4\}$

172) $\{4\}$

173) $\{9\}$

174) $\{25\}$

175) \emptyset

176) \emptyset

177) $(x - 2)(x^2 + 2x + 4)$

178) $(t + 7)(t^2 - 7t + 49)$

179) $(t + 9)(t^2 - 9t + 81)$

180) $(5 - t)(25 + 5t + t^2)$

181) $x \left(x - \frac{1}{3} \right) \left(x^2 + \frac{1}{3}x + \frac{1}{9} \right)$

182) $x \left(x - \frac{1}{6} \right) \left(x^2 + \frac{1}{6}x + \frac{1}{36} \right)$