Other Chapters Final Exam Practice
Winter 2010 V01

Name_____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

Perform the indicated operation or operations.

1) $(7 - 9)^2(4 - 6)^3$

2) $(7 - 9)^2(3 - 5)^3$

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

List all the elements of B that are elements of the given set.

3) $B = \{20, \sqrt{8}, -22, 0, \frac{0}{6}, \sqrt{4}\}$ Integers

A) $20, -22, 0, \frac{0}{6}, \sqrt{4}$ B) $20, -22, 0$ C) $20, 0, \sqrt{4}$ D) $20, 0$

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

Provide an appropriate response.

4) List all the rational numbers in this set.

$\left\{8, \sqrt{6}, -2, 0, \pi, \sqrt{16}, \frac{22}{7}, 0.26\right\}$

5) List all the rational numbers in this set.

$\left\{14, \sqrt{8}, -8, 0, \pi, \sqrt{16}, \frac{22}{7}, 0.21\right\}$

Perform the indicated operation or operations.

6) $\left(-\frac{1}{3}\right) \div \left(-\frac{8}{5}\right)$

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

List all the elements of B that are elements of the given set.

7) B = $\{10, \sqrt{8}, -20, 0, \frac{0}{25}, \sqrt{25}\}$ Natural numbers

A) $10, \sqrt{25}$ B) 10, 0 C) $10, 0, \sqrt{25}$ D) $10, 0, \frac{0}{5}$

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

Perform the indicated operation or operations.

8) $\left(7\frac{2}{3}\right)(-9)$

9) $\left(3\frac{5}{6}\right)\left(-1\frac{1}{2}\right)$

10) (–5)(–4) ÷ (9 – 13)

11) (–6)(–4) ÷ (9 – 13)

Provide an appropriate response.

12) Insert either < or > in the area between the pair of numbers to make a true statement: –82 ____ –77.

13) Insert either < or > in the area between the pair of numbers to make a true statement: –49 ____ –55.

14) Find the absolute value: $|-15.3|$.

15) Find the absolute value: $|-15.2|$.

Determine whether the given number is a solution of the equation.

16) $\frac{1}{2}(x + 4) = \frac{1}{12}x + \frac{3}{2}$; –5

17) $\frac{1}{3}(x + 1) = \frac{1}{15}x + \frac{2}{3}$; -7

Solve the problem.

18) Sara invested \$7600 in two stocks paying 10% and 7% annual interest, respectively. At the end of the year, the total interest from these investments was \$595. How much was invested at each rate?

19) Sara invested \$6300 in two stocks paying 9% and 7% annual interest, respectively. At the end of the year, the total interest from these investments was \$517. How much was invested at each rate?

Solve.

20) How much pure acid should be mixed with 6 gallons of a 50% acid solution in order to get an 80% acid solution?

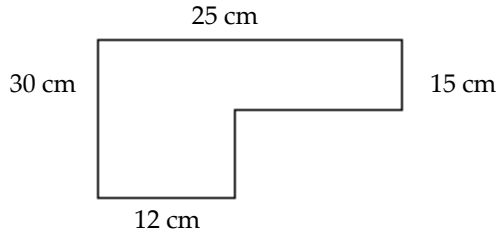
21) How much pure acid should be mixed with 8 gallons of a 50% acid solution in order to get an 80% acid solution?

22) Sue took her collection of nickels and dimes to deposit in the bank. She has five fewer nickels than dimes. Her total deposit was \$74.00. How many dimes did she deposit?

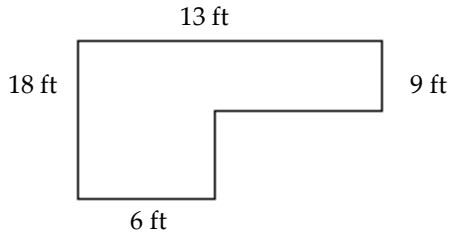
23) Sue took her collection of nickels and dimes to deposit in the bank. She has five fewer nickels than dimes. Her total deposit was \$38.60. How many dimes did she deposit?

Find the area of the figure.

24)

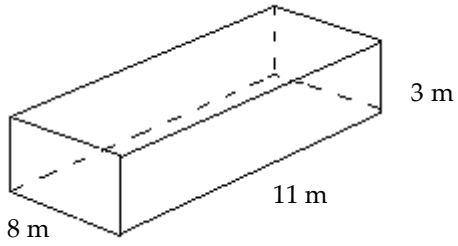


25)

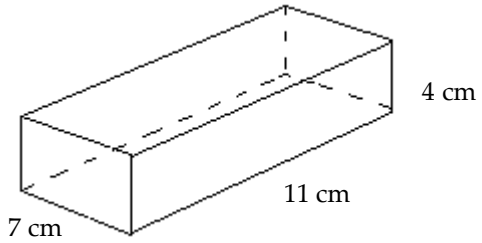


Find the volume of the figure. Where applicable, express answers in terms of π.

26)



27)



Solve the problem.

28) What will it cost to cover a rectangular floor measuring 90 feet by 60 feet with square tiles that measure 3 feet on each side if a box of 10 tiles costs $15 per box?

29) What will it cost to cover a rectangular floor measuring 90 feet by 50 feet with square tiles that measure 3 feet on each side if a box of 10 tiles costs $15 per box?

30) How many degrees are there in an angle that measures 30° more than the measure of its compliment?

Find the measure of the indicated angle.

31) Find the measure of the complement of 56°.

32) Find the measure of the complement of 31°.

33) Find the measure of the supplement of 23°.

34) Find the measure of the supplement of 86°.

35) Find the measure of the supplement of 106°.

36) Find the measure of the supplement of 126°.

37) The angle's measure is 60° more than that of its complement.

38) The angle's measure is 50° more than that of its complement.

39) The angle's measure is 50° more than that of its supplement.

40) The angle's measure is 70° more than that of its supplement.

41) The angle's measure is 20° more than triple that of its supplement.

42) The angle's measure is 60° more than triple that of its supplement.

43) The angle's measure is 80° more than triple that of its supplement.

1) –32
2) –32
3) A
4) $8, -2, 0, \sqrt{16}, \frac{22}{7}, 0.26$
5) $14, -8, 0, \sqrt{16}, \frac{22}{7}, 0.21$
6) $\frac{5}{24}$
7) A
8) – 69
9) $-\frac{23}{4}$
10) –5
11) –6
12) <
13) >
14) 15.3
15) 15.2
16) not a solution
17) not a solution
18) $2100 at 10% and $5500 at 7%
19) $3800 at 9% and $2500 at 7%
20) 9 gal
21) 12 gal
22) 495 dimes
23) 259 dimes
24) 555 cm^2
25) 171 ft^2
26) 264 m^3
27) 308 cm^3
28) $900
29) $750
30) 60°
31) 34°
32) 59°
33) 157°
34) 94°
35) 74°
36) 54°
37) 75°
38) 70°
39) 115°
40) 125°
41) 140°
42) 150°
43) 155°