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

Solve.

1) There are approximately 2.54 centimeters in 1 inch. How many inches are there in 85 centimeters? (Round to the nearest hundredth.) 1) _____
A) 3.35 in. B) 0.03 in. C) 2.99 in. D) 33.46 in.

2) Erin buys $9.70 worth of gasoline for her car. If the gas station charges $1.549 per gallon, how many gallons did she get? (Round to the nearest tenth.) 2) _____
A) 16.0 gal B) 1.6 gal C) 6.3 gal D) 62.6 gal

3) In a track meet, Dylan runs 600 meters in 98.4 seconds. What was his average speed in meters per second? (Round to the nearest tenth.) 3) _____
A) 6.1 m/s B) 1.6 m/s C) 0.2 m/s D) 61 m/s

4) In one week, Manisha worked 33.25 hours walking dogs and earned $258.25, including tips. How much did Manisha earn per hour? (Round to the nearest cent if necessary.) 4) _____
A) $7.77 B) $7.79 C) $7.87 D) $7.75

5) Jennifer, Lionel, and Steven enter a 43.0-mile bicycle team relay race. They complete the course in 1.96 hours. What was their average speed on the course? (Round to the nearest tenth.) 5) _____
A) 2.2 mi/hr B) 21.9 mi/hr C) 0.5 mi/hr D) 0.0 mi/hr

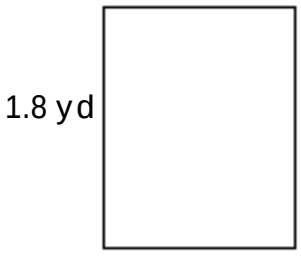
6) The water in a tank weighs 623.67 lb. One cubic foot of water weighs 62.5 lb. How many cubic feet of water are in the tank? (Round to the nearest hundredth.) 6) _____
A) 38,979.38 cu. ft B) 686.17 cu. ft C) 0.10 cu. ft D) 9.98 cu. ft

7) Some desert areas get only 8-10 inches of rainfall per year (365 days). If in one year the rainfall was 9.78 inches, what was the average daily rainfall for that year? (Round to the nearest thousandth.) 7) _____
A) 0.268 in. B) 0.027 in. C) 0.028 in. D) 0.269 in.

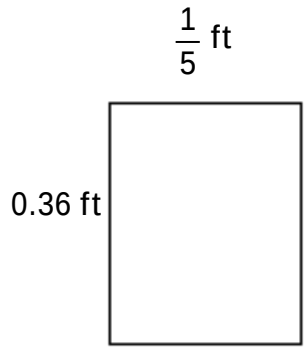
8) In one year, a baseball player got 139 hits in 359 times at bat. What was his batting average? Give decimal notation to the nearest thousandth. 8) _____
A) 0.397 B) 0.387 C) 0.390 D) 0.367

Find the area of the triangle or rectangle. Round to the nearest thousandth, if necessary.

9) $\frac{7}{8}$ yd 9) _____

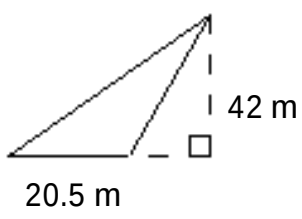


A) -15.65 sq. yd B) 1.575 sq. yd C) 5.35 sq. yd D) 1.554 sq. yd

10) 

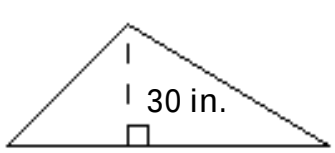
10) _____

A) 0.56 sq. ft B) 1.12 sq. ft C) 0.072 sq. ft D) 0.073 sq. ft

11) 

11) _____

A) 882 sq. m B) 430.5 sq. m C) 987 sq. m D) 861 sq. m

12) 

12) _____

A) 450 sq. in. B) 1515 sq. in. C) 757.5 sq. in. D) 510 sq. in.

Write the fraction as a decimal. If necessary, use repeating decimal notation.

13) $-\frac{13}{40}$ 13) _____

A) -0.325 B) -0.525 C) -0.225 D) -0.425

14) $\frac{5}{4}$ 14) _____

A) 0.8 B) 1.25 C) 1.5 D) 1

15) $-\frac{13}{20}$ 15) _____

A) $-0.6\overline{5}$ B) -0.65 C) $-0.\overline{655}$ D) $-0.\overline{65}$

16) $\frac{19}{16}$ 16) _____

A) $1.1\overline{875}$ B) 1.1875 C) $1.187\overline{5}$ D) $1.18\overline{75}$

17) $-\frac{1}{9}$ 17) _____

A) $-0.\overline{01}$ B) -0.1 C) -0.01 D) $-0.\overline{1}$

5.6.18 Decimal--Equations, Problem Solving 1

Solve the equation.

18) $4(x - 1.1) = 9.3$ 18) _____

A) 13.7 B) 2.6 C) 3.425 D) 2.05

19) $1.6x - 3.4 = 0.8x - 3.16$ 19) _____

A) 0.2 B) 0.27 C) 0.3 D) 3.333

20) $-5.7 = 14.2 - x$ 20) _____

A) 19.4 B) 8 C) 8.5 D) 19.9

21) $1.5x - 3.1 = 0.8x + 2.15$ 21) _____

A) -0.133 B) 7.5 C) 7.575 D) 7.51

22) $5(3x - 0.4) = 8x - 2$ 22) _____

A) 0 B) 7 C) -0.229 D) 0.571

23) $8x + 17 = 3x - 5$ 23) _____

A) -5.4 B) -2.273 C) -4.4 D) -0.227

24) $-0.7x + 1.15 = -0.4x + 1.45$ 24) _____

A) -9.091 B) -2.727 C) 1 D) -1

Solve the equation by first multiplying both sides through by an appropriate power of 10 so that the equation contains integers only.

25) $1.2x - 3 - 0.7x = 13.5$ 25) _____

A) 8.684 B) 3.3 C) 33 D) 27.6

26) $0.1x + 0.8 = -0.4$ 26) _____

A) -1.2 B) -4 C) 4 D) -12

Solve the equation.

27) $-16.1 = -2.3x$ 27) _____

A) -13.8 B) 2.0 C) 13.8 D) 7.0

28) $x + 2.5 = 8.2$ 28) _____

A) 5.7 B) 10.7 C) 3.28 D) -5.7

29) $7.7 = y - 4$ 29) _____

A) 1.925 B) 11.7 C) 7.3 D) 8.1

Answer Key
Testname: 5.6.18 DECIMALS-EQUATIONS, PROBLEM SOLVING 1

1) D
2) C
3) A
4) A
5) B
6) D
7) B
8) B
9) B
10) C
11) B
12) C
13) A
14) B
15) B
16) B
17) D
18) C
19) C
20) D
21) B
22) A
23) C
24) D
25) C
26) D
27) D
28) A
29) B