

5.6.18 Decimal--Equations, Problem Solving 3

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

Solve the equation.

- 1) $5x + 3.7 = 2x - 11$ 1) _____
A) -5 B) -4.9 C) -0.204 D) -2.041
- 2) $-0.7x + 1.15 = -0.4x + 2.65$ 2) _____
A) -45.455 B) -5 C) -13.636 D) 5
- 3) $x + 2.2 = 8.1$ 3) _____
A) 10.3 B) 5.9 C) 3.682 D) -5.9
- 4) $4.3 = 18.3 - x$ 4) _____
A) 22.6 B) 13.5 C) 14 D) 22.1
- 5) $6(x - 1.6) = 9.3$ 5) _____
A) 1.283 B) 1.817 C) 3.15 D) 18.9
- 6) $1.2x - 3.2 = 0.4x - 2.08$ 6) _____
A) 1.3 B) 1.26 C) 1.4 D) -0.714
- 7) $7.6 = y - 2$ 7) _____
A) 3.8 B) 9.6 C) 7.8 D) 7.4
- 8) $-24.4 = -6.1x$ 8) _____
A) -18.3 B) 4.0 C) 2.0 D) 18.3
- 9) $6(3x - 0.2) = 3x - 1.2$ 9) _____
A) -0.067 B) 15 C) 0.16 D) 0
- 10) $1.4x - 4.2 = 0.8x - 1.92$ 10) _____
A) 3.762 B) 3.8 C) 0.263 D) 3.79

Solve.

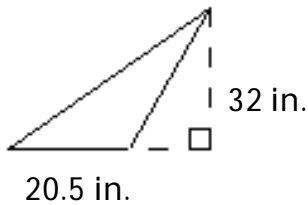
- 11) Madison, Nicole, and Maria enter a 52.6-mile bicycle team relay race. They complete the course in 2.25 hours. What was their average speed on the course? (Round to the nearest tenth.) 11) _____
A) 0.4 mi/hr B) 234.0 mi/hr C) 4.0 mi/hr D) 23.4 mi/hr
- 12) In a track meet, Laura runs 400 meters in 54.9 seconds. What was her average speed in meters per second? (Round to the nearest tenth.) 12) _____
A) 72.9 m/s B) 7.3 m/s C) 1.4 m/s D) 0.1 m/s
- 13) In one year, a baseball player got 149 hits in 466 times at bat. What was his batting average? Give decimal notation to the nearest thousandth. 13) _____
A) 0.300 B) 0.330 C) 0.323 D) 0.320

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- 14) The water in a tank weighs 435.66 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.) 14) _____
 A) 498.16 cu. ft B) 0.14 cu. ft C) 27,228.75 cu. ft D) 6.97 cu. ft
- 15) Travis buys \$15.95 worth of gasoline for his car. If the gas station charges \$1.579 per gallon, how many gallons did he get? (Round to the nearest tenth.) 15) _____
 A) 10.1 gal B) 101.0 gal C) 1.0 gal D) 9.9 gal
- 16) There are approximately 1.609 kilometers in 1 mile. How many miles are there in 40 kilometers? (Round to the nearest hundredth.) 16) _____
 A) 248.60 mi B) 0.04 mi C) 24.86 mi D) 4.02 mi
- 17) Some desert areas get only 8-10 inches of rainfall per year (365 days). If in one year the rainfall was 8.48 inches, what was the average daily rainfall for that year? (Round to the nearest thousandth.) 17) _____
 A) 0.023 in. B) 0.232 in. C) 0.233 in. D) 0.024 in.
- 18) In one week, Sunil worked 34.25 hours walking dogs and earned \$254.25, including tips. How much did Sunil earn per hour? (Round to the nearest cent if necessary.) 18) _____
 A) \$7.42 B) \$7.44 C) \$7.52 D) \$7.40

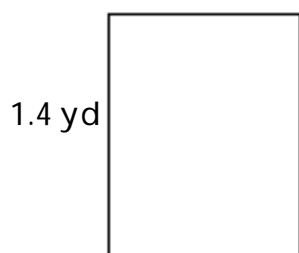
Find the area of the triangle or rectangle. Round to the nearest thousandth, if necessary.

- 19) 19) _____



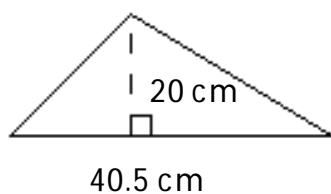
- A) 656 sq. in. B) 576 sq. in. C) 328 sq. in. D) 512 sq. in.

- 20) $\frac{4}{5}$ yd 20) _____



- A) 1.131 sq. yd B) 4.4 sq. yd C) 15.4 sq. yd D) 1.12 sq. yd

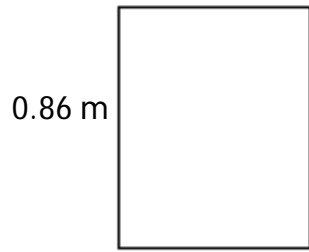
- 21) 21) _____



- A) 250 sq. cm B) 200 sq. cm C) 405 sq. cm D) 810 sq. cm

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22) $\frac{5}{8}$ m 22) _____



- A) 1.485 sq. m B) 2.97 sq. m C) 0.538 sq. m D) 0.544 sq. m

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

23) $-\frac{24}{25}$ 23) _____

- A) -1.16 B) -0.86 C) -1.06 D) -0.96

24) $-\frac{4}{9}$ 24) _____

- A) -0.04 B) $-0.\overline{04}$ C) $-0.\overline{4}$ D) -0.4

25) $-\frac{13}{20}$ 25) _____

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

26) $\frac{7}{5}$ 26) _____

- A) 0.71 B) 1.6 C) 1.2 D) 1.4

27) $\frac{47}{16}$ 27) _____

- A) $2.9\overline{375}$ B) $2.9\overline{375}$ C) $2.9\overline{375}$ D) 2.9375

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

28) $1.6x - 3 - 1.1x = 14.5$ 28) _____

- A) 35 B) 3.5 C) 6.481 D) 29.6

29) $0.3x + 0.2 = -0.4$ 29) _____

- A) -0.2 B) 0.667 C) -0.667 D) -2

Answer Key

Testname: 5.6.18 DECIMALS-EQUATIONS, PROBLEM SOLVING 3

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