

5.6.18 Decimal--Equations, Problem Solving 2

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

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

1) $-\frac{23}{25}$ 1) _____

- A) -1.12 B) -0.92 C) -0.82 D) -1.02

2) $-\frac{19}{20}$ 2) _____

- A) $-0.95\bar{}$ B) $-0.9\bar{5}$ C) $-0.9\bar{55}$ D) -0.95

3) $-\frac{2}{3}$ 3) _____

- A) -0.06 B) -0.6 C) $-0.\bar{6}$ D) $-0.\bar{06}$

4) $\frac{6}{5}$ 4) _____

- A) 1.4 B) 1 C) 0.83 D) 1.2

5) $\frac{27}{16}$ 5) _____

- A) $1.6\bar{875}$ B) $1.687\bar{5}$ C) 1.6875 D) $1.687\bar{5}$

Solve the equation.

6) $6(x - 1.9) = 9.3$ 6) _____

- A) 3.45 B) 20.7 C) 1.233 D) 1.867

7) $5x - 3.8 = 3x - 9$ 7) _____

- A) -2.5 B) -0.385 C) -3.846 D) -2.6

8) $1.1x - 3.2 = 0.5x - 2.06$ 8) _____

- A) 1.9 B) 0.526 C) 1.8 D) 1.71

9) $-0.7x + 1.15 = -0.4x + 1.75$ 9) _____

- A) -5.455 B) -18.182 C) -2 D) 2

10) $x + 2.2 = 8.7$ 10) _____

- A) 6.5 B) -6.5 C) 10.9 D) 3.955

11) $7.5 = y - 7$ 11) _____

- A) 8.2 B) 6.8 C) 1.071 D) 14.5

12) $6.8 = 10.1 - x$ 12) _____

- A) 2.8 B) 3.3 C) 16.9 D) 16.4

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13) $5(3x - 0.4) = 4x - 2$

A) -0.145

B) 0

C) 0.364

D) 11

13) _____

14) $-60.0 = -7.5x$

A) 8.0

B) 52.5

C) -52.5

D) 2.0

14) _____

15) $1.2x - 4.6 = 0.7x - 2$

A) 5.148

B) 5.19

C) -0.192

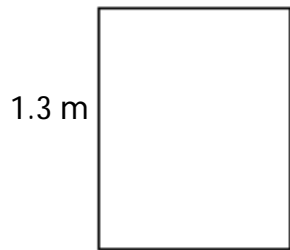
D) 5.2

15) _____

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

16)

$\frac{1}{2}$ m



A) 0.65 sq. m

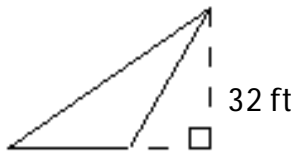
B) 9.6 sq. m

C) 0.656 sq. m

D) 3.6 sq. m

16) _____

17)



25.5 ft

A) 592 sq. ft

B) 816 sq. ft

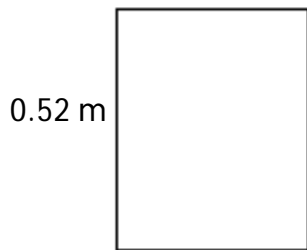
C) 408 sq. ft

D) 512 sq. ft

17) _____

18)

$\frac{3}{8}$ m



A) 0.191 sq. m

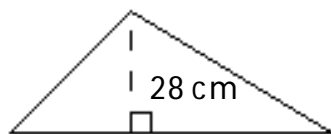
B) 1.79 sq. m

C) 0.195 sq. m

D) 0.895 sq. m

18) _____

19)



45.5 cm

A) 476 sq. cm

B) 637 sq. cm

C) 1274 sq. cm

D) 392 sq. cm

19) _____

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Solve.

- 20) In one week, Ashok worked 31.5 hours walking dogs and earned \$251.50, including tips. How much did Ashok earn per hour? (Round to the nearest cent if necessary.) 20) _____
A) \$7.98 B) \$8.08 C) \$8.00 D) \$7.96
- 21) Travis buys \$10.65 worth of gasoline for his car. If the gas station charges \$1.549 per gallon, how many gallons did he get? (Round to the nearest tenth.) 21) _____
A) 0.1 gal B) 0.7 gal C) 1.5 gal D) 6.9 gal
- 22) In one year, a baseball player got 193 hits in 510 times at bat. What was his batting average? Give decimal notation to the nearest thousandth. 22) _____
A) 0.381 B) 0.388 C) 0.378 D) 0.358
- 23) Some desert areas get only 8-10 inches of rainfall per year (365 days). If in one year the rainfall was 9.57 inches, what was the average daily rainfall for that year? (Round to the nearest thousandth.) 23) _____
A) 0.262 in. B) 0.263 in. C) 0.026 in. D) 0.027 in.
- 24) There are approximately 3.28 feet in 1 meter. How many meters are there in 120 feet? (Round to the nearest hundredth.) 24) _____
A) 2.73 m B) 0.03 m C) 36.59 m D) 365.85 m
- 25) In a track meet, Jordan runs 600 meters in 89.3 seconds. What was her average speed in meters per second? (Round to the nearest tenth.) 25) _____
A) 1.5 m/s B) 6.7 m/s C) 0.1 m/s D) 67.2 m/s
- 26) Jennifer, Nicole, and Maria enter a 33.9-mile bicycle team relay race. They complete the course in 1.79 hours. What was their average speed on the course? (Round to the nearest tenth.) 26) _____
A) 18.9 mi/hr B) 5.0 mi/hr C) 189.0 mi/hr D) 0.5 mi/hr
- 27) The water in a tank weighs 308.69 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.) 27) _____
A) 4.94 cu. ft B) 371.19 cu. ft C) 0.20 cu. ft D) 19,293.13 cu. ft

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

- 28) $0.5x + 0.6 = -0.4$ 28) _____
A) -2 B) -0.4 C) 0.4 D) -0.2
- 29) $1.3x - 3 - 0.8x = 15$ 29) _____
A) 8.571 B) 36 C) 3.6 D) 30.6

Answer Key

Testname: 5.6.18 DECIMALS-EQUATIONS, PROBLEM SOLVING 2

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