

ANSWERS TO YOU-TRY PROBLEMS

Lesson 1 – Whole Numbers

- 4: Twelve million, three hundred four thousand, six hundred fifty two
5: 12,000,000
6: 12,304,700
7: Hundred thousand
14: 9
15: 3
17: A one-year membership would cost \$633.

Lesson 2 – Introduction to Fractions

- 4: 1, 2, 3, 6, 8, 18
5: $270 = 2 \times 3^3 \times 5$
7: Answers vary
10 and 12: review video links from lesson media problems
13: $5\frac{2}{11}$
14: $\frac{41}{5}$
18: Some possible answers: $\frac{3}{8} = \frac{6}{16} = \frac{9}{24} = \frac{12}{32} = \frac{15}{40} = \frac{18}{48}$
19: $\frac{5}{9}$
24: $\frac{1}{4}$ of the senators voted against the bill.

Lesson 3 – Fraction Addition & Subtraction

- 3: a. $\frac{2}{3}$ b. $\frac{6}{13}$
6: a. $\frac{47}{40} = 1\frac{7}{40}$ b. $\frac{1}{15}$
8: a. $\frac{31}{12} = 2\frac{7}{12}$ b. $\frac{81}{8} = 10\frac{1}{8}$
13: a. $\frac{6}{6} = 1$ b. $\frac{21}{3} = 7$
15: Total time was $17\frac{1}{6}$ hr. 17: $\frac{107}{120}$

Lesson 4 – Fraction Multiplication & Division

2: a. $\frac{40}{5} = 8$ b. $\frac{35}{8} = 4\frac{3}{8}$

4: 1175 Hip Hop songs

6: a. $\frac{2}{33}$ b. $\frac{1}{35}$ c. $\frac{13}{2} = 6\frac{1}{2}$

8: 80 sections

11: a. $\frac{27}{343}$ b. $\frac{9}{5} = 1\frac{4}{5}$

14: Bill's wages were \$640 the week he worked 56 hours.

Lesson 5 – Decimals

4a: Twelve and six hundred nineteen thousandths

4b: 12.70

4b: The tenths place

6: a. $5\frac{3}{8}$ b. $\frac{1}{40}$

8: a. 21.240 b. 4.556 c. 3.545

10: 38.38

13: a. \$20.05 b. \$312

16: 3.05, 3.055, 3.5, 3.55, 3.555, $3\frac{3}{5}$

17: Rally had \$12.58 left over from his trip to Target.

Lesson 6 – Percents

3a: $\frac{1}{9} = 0.1111 = 11.11\%$

3b: $\frac{1}{16} = 0.0625 = 6.25\%$

3c: $\frac{4}{5} = 0.8000 = 80\%$

7a: $x = 0.15 \cdot 324$, $x = 48.60$

7b: $0.2512 \cdot 132 = x$, $33.16 = x$

9a: $.40 \cdot x = 20$, $x = 50$

9b: $105 = .1515 \cdot x$, $x = 693.07$

11a: $x \cdot 12 = 8$, $x = 0.67 = 67\%$

11b: $105 = x \cdot 123$, $x = 0.85 = 85\%$

15: Percent statement – 270 is what percent of 538?

Percent equation $270 = x \cdot 538$, $x = .5019 = 50.19\%$

18a: $62 - 54 = 8$. Percent statement 8 is what percent of 54?

Percent equation $8 = x \cdot 54$, $x = .1481 = 14.81\%$ increase

18b: $50 - 40 = 10$. Percent statement 10 is what percent of 50?

Percent equation $10 = x \cdot 50$, $x = .2000 = 20.00\%$ decrease

21a: 30% of 85 is \$25.50 discount. Sale price is \$59.50.

21b: $I = (14000)(.03)(10) = \$4200$. Final Balance = \$18200.

Lesson 7 – Ratio, Rates & Proportions

5a: $\frac{1}{2}$ [Notice that the units cancelled. This ratio is NOT a rate]

5b: $\frac{4\text{geese}}{5\text{ducks}}$ [Notice that the units did NOT cancel. This ratio IS a rate.]

9: Option 1 is the better buy per pill.

13a: $x = 6$

13b: $p = 8.33$

15: Mary will earn \$140.63 in 15 hours this week.

Lesson 8 – Statistics

2: Mean 4.625, Median 4, Mode 3

5: The student's GPA for the term was 3.23.

8: The range = 11.

12: 16537 people volunteered in an Educational capacity.

14a: 9

14b: 35

14c: 25.71%

14d: 71.43%

Lesson 9 –Units & Conversions

10a: 96 in

10b: 1.1 lb

10c: 300 ft

10d: 5.1 tons

10e: 80 in

10f: 1440 square inches or 1440 in²

13: 7 inches

16a: 1,510,000 mm

16b: 0.01350 l

16c: 5000 m

19a: 2.11 qt, 0.53 gal

19b: 6.21 mi

19c: 3.28 yd

19d: 0.04 c

Lesson 10 – Geometry: Perimeter & Area

5a: 8.68 feet

5b: 16

5c: 14

5d: Exact 12π in, Rounded 37.7 in

5e: Exact 14.8π in, Rounded 46.5 in

11a: 17.6 ft^2 or 17.6 square feet

11b: 16.0

11c: 42.0 in^2 or 42.0 square inches

11d: Exact $36\pi \text{ in}^2$ or 36π square inches, Rounded 113.0 in^2 or 113.0 square inches

Lesson 11 – Geometry: Volume

4a: 34.4 m^3 or 34.4 cubic meters

4b: 60.0 ft^3 or 60.0 cubic feet

4c: 670.2 cm^3 or 670.2 cubic centimeters

4d: 904.3 yd^3 or 904.3 cubic yards

8: $x = 21.3$

11a: 15 (perfect square)

11b: 4.12 (not a perfect square)

11c: 18 (perfect square)

14: 57.58 feet

Lesson 12 – Signed Numbers

7: -59, -324, 253.34, 253.34

8a: 3

8b: 3

8c: -3

8d: -3

9: Numbers should be placed as indicated by the directions in the following order:

-5, -3, -1.5, 2.5, |-4|

10: Chaotic Coaster drops the most by 11 feet.

12a: 1

12b: $-\frac{14}{5} = -2\frac{4}{5}$

12c: 11

14: 3

16a: 12

16b: $\frac{1}{64}$

16c: 4

18a: $-\frac{51}{8} = -6\frac{3}{8}$

18b: $-\frac{5}{8}$

20: The new balance is \$2255.11