

Makled: 6th Grade Math

Practice and Problem Solving

Answer Key-Pgs. 19-26

Use this to check your answers. The important part is understanding HOW AND WHY to be prepared for your test tomorrow- not just copying down the correct answers.

Pg. 19

- 1.) 5:4, 5 to 4, or $\frac{5}{4}$
- 2.) 3:12 or 1:4
- 3.) 12 total to 5 peaches; $\frac{12}{5}$, 12:5, or 12 to 5
12 total to 3 bananas; $\frac{12}{3}$, 12:3, or 12 to 3
12 total to 4 oranges; $\frac{12}{4}$, 12:4, or 12 to 4

Pg. 20

- 4.) $\frac{11}{14}$, 11:14, or 11 to 14
 $\frac{14}{25}$, 14:25, or 14 to 25
 $\frac{25}{11}$, 25:11, or 25 to 11
 $\frac{14}{11}$, 14:11, or 14 to 11
- 5.) A. False b. True c. False d. True e. True
- 6.) They are both correct because they both wrote their own ratio in the correct order.

Pg. 21

- 1.) 48 red beads
- 2.) 8 bracelets
- 3.) The rate is $\frac{3}{1}$ because 12 red beads divided by 4 bracelets is equal to 3 red beads per 1 bracelet.
- 4.) No, James is not correct. He needs 3 red beads per bracelet, so 75 bracelets multiplied by 3 red beads per bracelet = 225 total red beads, not 25 red beads. James divided 75 bracelets by 3 to get 25.

Pg. 22

- 5.) 40 glasses of orange juice
- 6.) 120 minutes (2 hours)
- 7.) The restaurant should expect to sell more than 100 omelets during breakfast. If breakfast is from 6 am - 10:30am, that means breakfast is 4 hours and 30 minutes, which is equal to 270 total minutes. If they sell 6 omelets every 15 minutes, then in 30 minutes, they will sell 12 omelets, because it is double. 270 minutes is 9 times 30 minutes, so 9 times 12 omelets is 108 omelets, which is 8 more than 100 omelets in 270 minutes. $\frac{6 \text{ omelets}}{15 \text{ minutes}} = \frac{12 \text{ omelets}}{30 \text{ minutes}} = \frac{108 \text{ omelets}}{270 \text{ minutes}}$.

Pg. 23

- 1.) (8, 24)

- 2.) (2,6) Jorge walks 6 feet in 2 steps; (4, 12) Jorge walks 12 feet in 4 steps; (6, 18) Jorge walks 18 feet in 6 steps; (10,30) Jorge walks 30 feet in 10 steps.
- 3.) (3,9)
- 4.) No, Joan is not correct. The number of feet is always 3 times the number of steps, not the number of steps is always 3 times the number of feet. The number of steps is always $\frac{1}{3}$ the number of feet.

Pg. 24

- 5.) 1 white : 4 blue; 2 white : 8 blue, 3 white : 12 blue; 4 white : 16 blue
- 6.) Yes, they are equivalent because they have equivalent scale factors and are equivalent when checked using the butterfly method.
- 7.) 6 yards of white yarn.
- 8.) Yes, Jenny can make the scarf. She will need to use 10.5 yards of white yarn because 4 yards of blue yarn multiplied by a scale factor of 10.5 is equal to 42 yards of blue yarn; so 1 yard of white yarn multiplied by a scale factor of 10.5 is equal to 10.5 yards of white yarn.
- 9.) 17.5 pages in 25 minutes
- 10.) Yes, Max is reading at a faster rate than Adrianna. If Adrianna reads 7 pages / 10 minutes, this means that she reads at a rate of 0.7 pages per 1 minute. If Max reads at a rate of 2 pages per minute, and 2 is 1.3 greater than 0.7, then Max is reading 1.3 pages per minute faster than Adrianna.

Pg. 25

- 1.) B- If all the ratios are put into simplest form, they are all 3:8, except for B, which is 1:3.
- 2.) The coordinates of the point are (8, 2), which is a "divide by 4" relationship. D also has a "divide by 4" relationship. Oscar multiplied by 4 instead of dividing by 4, which is why he chose A.

Pg. 26

- 3.) A. True b. False c. False d. True
- 4.) B and C
- 5.) Rosa earns \$3.33 per hour and Ralph earns \$3.50 per hour, so Ralph earns \$0.17 more per hour than Rosa. After 12 hours, Ralph earns \$42 and Rosa earns \$40, so Ralph earns \$2 more than Rosa after 12 hours of work.