

PROPORTIONS – JIM

1. Jim earned \$120 mowing 8 lawns. At this rate, how much will he **earn** mowing 10 lawns?

① \$130
 ② \$140
 ③ \$150
 ④ \$160
 ⑤ \$170

2. To make punch, combine 5 parts juice with 2 parts ginger ale. How much **ginger ale** should you add to 10 liters of juice?

	⊗	⊗	⊗	
⊙	⊙	⊙	⊙	⊙
①	①	①	①	①
②	②	②	②	②
③	③	③	③	③
④	④	④	④	④
⑤	⑤	⑤	⑤	⑤
⑥	⑥	⑥	⑥	⑥
⑦	⑦	⑦	⑦	⑦
⑧	⑧	⑧	⑧	⑧
⑨	⑨	⑨	⑨	⑨

3. The scale on a highway map is 1 inch equals 10 miles. How many **miles** between two cities that are 4 inches apart on the map?

① 40 miles
 ② 50 miles
 ③ 60 miles
 ④ 70 miles
 ⑤ 80 miles

4. Bert gets 32 miles to the gallon. How many **miles** can Bert drive on 12 gallons?

① 324 miles
 ② 364 miles
 ③ 384 miles
 ④ 394 miles
 ⑤ 400 miles

5. Gary reads on a cereal box that 1 cup of cereal has 230 calories. How many **calories** do 2 cups of cereal have?

	⊗	⊗	⊗	
⊙	⊙	⊙	⊙	⊙
①	①	①	①	①
②	②	②	②	②
③	③	③	③	③
④	④	④	④	④
⑤	⑤	⑤	⑤	⑤
⑥	⑥	⑥	⑥	⑥
⑦	⑦	⑦	⑦	⑦
⑧	⑧	⑧	⑧	⑧
⑨	⑨	⑨	⑨	⑨

6. Pat wants to use a copy machine to enlarge a small rectangular picture that measures $1\frac{1}{4}$ inches wide by 2 inches long. Pat wants to enlarge it to make it 4 inches long. How **wide** will the picture be?

① $2\frac{1}{2}$ " wide
 ② $3\frac{1}{2}$ " wide
 ③ $4\frac{1}{2}$ " wide
 ④ 5" wide
 ⑤ $5\frac{1}{2}$ " wide

PROPORTIONS – JIM

7. The city architect is planning a parking lot. For every 12 commuters, the parking lot will need 5 parking spaces. How many **parking spaces** will be needed by 132 commuters?

	⊗	⊗	⊗	
⊙	⊙	⊙	⊙	⊙
①	①	①	①	①
②	②	②	②	②
③	③	③	③	③
④	④	④	④	④
⑤	⑤	⑤	⑤	⑤
⑥	⑥	⑥	⑥	⑥
⑦	⑦	⑦	⑦	⑦
⑧	⑧	⑧	⑧	⑧
⑨	⑨	⑨	⑨	⑨

8. A recipe that serves 8 people calls for 2 cups of milk. How many cups of **milk** will be needed for 36 people?
- 8 cups of milk
 - 9 cups of milk
 - 10 cups of milk
 - 12 cups of milk
 - 18 cups of milk
9. A person uses about 315 calories to jog 3 miles. How many **calories** will be used in a 10 mile jog?
- 945 calories
 - 1,005 calories
 - 1,050 calories
 - 3,150 calories
 - 9,450 calories
10. The cost for a large Gatorade is \$.79:1 at Dan's Warehouse. How much would 30 large Gatorades **cost**?
- \$.26
 - \$.49
 - \$23.70
 - \$2,370
 - not enough information is given

11. An auto parts worker produces 55 products in 6 hours. Which of the following expressions shows the number of **products** he can complete in 10 hours at this rate?

- $\frac{(55 \times 6)}{10}$
- $\frac{(55 \times 10)}{6}$
- $55 \times 6 \times 10$
- $(6 \times 10) 55$
- $(55 \div 10) 6$

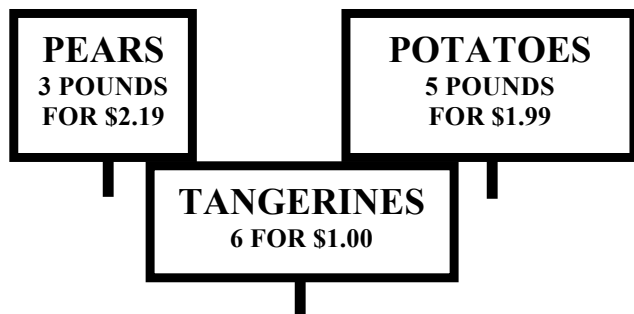
12. At Miller Manufacturing there are 6 men for every 2 women. If there are 12 women, how many **men** are there?

	⊗	⊗	⊗	
⊙	⊙	⊙	⊙	⊙
①	①	①	①	①
②	②	②	②	②
③	③	③	③	③
④	④	④	④	④
⑤	⑤	⑤	⑤	⑤
⑥	⑥	⑥	⑥	⑥
⑦	⑦	⑦	⑦	⑦
⑧	⑧	⑧	⑧	⑧
⑨	⑨	⑨	⑨	⑨

PROPORTIONS – JIM

Questions 13, 14, and 15 refer to the following information.

JACK'S VEGETABLE STAND



13. What is the **cost** of 15 pounds of potatoes?
- \$5.97
 - \$7.00
 - \$9.95
 - \$10.95
 - \$29.85
14. A customer bought \$5.00 worth of tangerines. How many **tangerines** did he buy?

	⊗	⊗	⊗	
⊙	⊙	⊙	⊙	⊙
①	①	①	①	①
②	②	②	②	②
③	③	③	③	③
④	④	④	④	④
⑤	⑤	⑤	⑤	⑤
⑥	⑥	⑥	⑥	⑥
⑦	⑦	⑦	⑦	⑦
⑧	⑧	⑧	⑧	⑧
⑨	⑨	⑨	⑨	⑨

15. Which expression shows the **cost** for 5 pounds of pears?
- $5 \times \$2.19$
 - $\frac{(\$2.19 \times 3)}{5}$
 - $\frac{(\$2.19 \times 5)}{3}$
 - $\frac{\$2.19}{5}$
 - $\$2.19 \times 5 \times 3$
16. A map scale indicates that 1 inch equals 75 miles. On this map, how many **inches** are there between Boston and Philadelphia, which are actually about 300 miles apart?

	⊗	⊗	⊗	
⊙	⊙	⊙	⊙	⊙
①	①	①	①	①
②	②	②	②	②
③	③	③	③	③
④	④	④	④	④
⑤	⑤	⑤	⑤	⑤
⑥	⑥	⑥	⑥	⑥
⑦	⑦	⑦	⑦	⑦
⑧	⑧	⑧	⑧	⑧
⑨	⑨	⑨	⑨	⑨

17. The ratio of union members to non union members at Tom's Factory is 8:3. 96 workers at the factory do not belong to the union. How many **union** members work at the factory?
- 56 union members
 - 256 union members
 - 765 union members
 - 786 union members
 - not enough information is given

PROPORTIONS – JIM

18. Ellen makes \$23.80 for working 7 hours. How much does she **earn** for working 12 hours?
- ① \$4.80
 - ② \$28.56
 - ③ \$40.80
 - ④ \$285.00
 - ⑤ \$408.00
19. The weight of 15 feet of aluminum tubing is 12 pounds. Find the **weight** of 25 feet of tubing.
- | | | | | |
|---|---|---|---|---|
| | | | | |
| | ⊗ | ⊗ | ⊗ | |
| ⊙ | ⊙ | ⊙ | ⊙ | ⊙ |
| ① | ① | ① | ① | ① |
| ② | ② | ② | ② | ② |
| ③ | ③ | ③ | ③ | ③ |
| ④ | ④ | ④ | ④ | ④ |
| ⑤ | ⑤ | ⑤ | ⑤ | ⑤ |
| ⑥ | ⑥ | ⑥ | ⑥ | ⑥ |
| ⑦ | ⑦ | ⑦ | ⑦ | ⑦ |
| ⑧ | ⑧ | ⑧ | ⑧ | ⑧ |
| ⑨ | ⑨ | ⑨ | ⑨ | ⑨ |
20. Jerry can walk 9 miles in $2\frac{1}{4}$ hours. At the same speed, how **many miles** can he walk in 5 hours?
- ① 2.25 miles
 - ② 20 miles
 - ③ 45 miles
 - ④ 50 miles
 - ⑤ 62 miles
21. The scale on a map is 2 inches = 65 miles. The distance between two cities on the map is 6 inches. Find the **distance in miles** between the cities in miles.
- ① 39 miles
 - ② 195 miles
 - ③ 390 miles
 - ④ 1950 miles
 - ⑤ 3,900 miles

22. The ratio of the width to the length of a photograph is 5:7. The picture was enlarged to be 20 inches wide. How **long** is the enlarged picture?
- ① 28" long
 - ② 30" long
 - ③ 38" long
 - ④ 40" long
 - ⑤ 42" long
23. In 1978, the Canadian divorce rate was 5 for every 1,000 people in the country. The population of Ottawa was 36,000 in 1978. The divorce rate in Ottawa was the same as the rate in the whole country. How many **divorces** were there in Ottawa that year?
- ① 18 divorces
 - ② 180 divorces
 - ③ 1,800 divorces
 - ④ 18,000 divorces
 - ⑤ 180,000 divorces
24. 2 ounces of gold is \$756. Find the **price** of 5 ounces of gold.
- ① \$189
 - ② \$378
 - ③ \$1,890
 - ④ \$2,090
 - ⑤ \$3,000
25. The ratio of wins to losses for the Lamar Bobcats team was 3:5. The team won 15 games. How many games did they **lose**?
- ① 19 losses
 - ② 25 losses
 - ③ 75 losses
 - ④ 100 losses
 - ⑤ 750 losses

PROPORTIONS – JIM

26. From a 15 acre field, Mr. Douglas can get 1,350 bushels of corn. How many **bushels of corn** can he get from a 40 acre field?

	⊗	⊗	⊗	
⊙	⊙	⊙	⊙	⊙
①	①	①	①	①
①	①	①	①	①
②	②	②	②	②
③	③	③	③	③
④	④	④	④	④
⑤	⑤	⑤	⑤	⑤
⑥	⑥	⑥	⑥	⑥
⑦	⑦	⑦	⑦	⑦
⑧	⑧	⑧	⑧	⑧
⑨	⑨	⑨	⑨	⑨

27. Pete mixed green paint and white paint in a ratio of 4:3. He used 12 gallons of white paint. How many **gallons of green** paint did he use?

- ① 16 gallons green paint
- ② 48 gallons green paint
- ③ 160 gallons green paint
- ④ 480 gallons green paint
- ⑤ 600 gallons green paint

28. In a recent year, the divorce rate in the United States was 5 for every 1000 people. The population of Trinidad is 15,000. If Trinidad follows the national rate, how many **divorces** were there in Trinidad that year?

- ① 75 divorces
- ② 750 divorces
- ③ 7,500 divorces
- ④ 16,000 divorces
- ⑤ 25,000 divorces

29. OJC has a 4:5 ratio of male students to female students. If there are 1,200 male students, how many **female** students are there?

- ① 15 female students
- ② 60 female students
- ③ 150 female students
- ④ 600 female students
- ⑤ 1500 female students