

Math Lesson 1 Answers

Tips

- The math section is 60 questions in 60 minutes
- You only need to get 31 or 32 correct to score a 21!
- If you are trying to get a 21, you must know how to do 25/60 questions. If you guess the same answer on the remaining questions you should get 20% right which would get you to 32 correct.
- There will probably be 2 to 5 questions that can be set up as proportions.
- Math is the only section that has 5 possible answers.

1. 20 doughnuts = x

1 hour 3 hours

$$1x = 60$$

$$X = 60 \text{ doughnuts}$$

2. \$4.04 = x

37 miles 3,737 miles

$$37x = 15,097.48$$

37 37

$$X = \$408.04$$

3. 30 mph = 70 mph

44 ft/sec x

$$30x = 3,080$$

30 30

$$X = 102.66 \text{ ft/sec}$$

4. 9 = x

6 8

$$6x = 72$$

6 6

$$X = 1$$

$$5. \quad \frac{3 \text{ eggs}}{6 \text{ servings}} = \frac{5 \text{ eggs}}{x}$$

$$3x = 30$$

$$3 \quad 3$$

$$x = 10$$

$$6. \quad \frac{\$17}{1 \text{ mph}} = \frac{\$221}{x}$$

$$17x = 221$$

$$17 \quad 17$$

$$x = 13$$

$$x = 13$$

The speed limit was 30 mph. You have to add the 13mph to get the speed Kirk was traveling.

The answer is 43 mph.

7. The order was for 200 t-shirts. You are looking for 1/2 the order which is 100 t-shirts.

$$\frac{8 \text{ t-shirts}}{1 \text{ hour}} = \frac{100 \text{ t-shirts}}{x}$$

$$8x = 100$$

$$8 \quad 8$$

$$x = 12.5$$

$$12.5 \text{ hours} = x$$

$$8. \quad \frac{5\%}{100 \text{ basis points}} = \frac{7.5\%}{x}$$

$$5x = 750$$

$$5 \quad 5$$

$$x = 150$$

$$x = 150$$

The question says the 7.5% is how many basis points greater than 5.5%?

If 7.5% is 150 basis points and 5.0% is 100 basis points, then the answer must be slightly less than 50 and the only logical answer is 40.