



# Speed Math 5th/6th

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| 1  | How many sides does a triangle have?  |
| 2  | What is the measure of an interior angle of a square, in degrees?   |
| 3  | Find the sum: $3 + 36 + 4$  |
| 4  | Find the difference: $25 - 18$  |
| 5  | Find the product: $3 * 8$   |
| 6  | Find the quotient: $63 \div 3$  |
| 7  | Evaluate: $2^5$   |
| 8  | Evaluate: $(2 + 4) - 3^2 + 15$  |
| 9  | Find the sum: $2.78 + 1.21$ (Express your answer as a decimal.)   |
| 10 | What is the perimeter of a rectangle with side lengths 6 units and 18 units?  |
| 11 | Evaluate: $\frac{1}{4} + \frac{2}{5}$ (Express your answer as a common fraction.)   |
| 12 | Find the median of the following data set: {1, 2, 8, 9, 3, 4, 5}  |
| 13 | What is the area of a triangle with a base length of 5 units and a height of 8 units?   |
| 14 | What is 81 times 9?   |
| 15 | While an optimist might view a cup as $\frac{2}{3}$ full, a pessimist would view this cup as ___ empty.   |
| 16 | Find the quotient: $1071 \div 17$   |
| 17 | I have 9 different keys, and only 1 of them will open a locked door. What is the maximum number of keys I have to test to be able to correctly identify the key that will open the locked door? |
| 18 | If $a = 2$ , $b = 3$ , and $c = 5$ , what is the value of $b + c - a$ ?   |
| 19 | 2 officers of our math club are female. If there are a total of 5 officers for our math club, what percent of officers are male?  |
| 20 | What is 25% of 80?  |
| 21 | A right trapezoid has bases of length 2 units and 18 units. The height of this trapezoid is 1 unit. What is the area of the trapezoid?  |
| 22 | What is the slope of the line $2x + 2y = -5$ ?  |
| 23 | What number is halfway between $\frac{4}{7}$ and $\frac{3}{7}$ ? (Express your answer as a common fraction.)  |

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| 24 | Which is greater: $4^3$ or $3^4$ ?  |
| 25 | Find the product: $1.2 \times 2.3$  |
| 26 | What is the remainder when 199 is divided by 10? (Answer as a integer between 0 and 9, inclusive.)  |
| 27 | If there is a 20% chance that it will rain meatballs tomorrow, what is the probability that meatballs <b>won't</b> rain tomorrow? (Express your answer as a common fraction.)   |
| 28 | You begin at the origin on the standard coordinate system. Assume that the positive y-axis points up. If you move 2 units down, 3 units to the right, and 4 units up, what are the coordinates of your new location? (Give your answer as a coordinate pair $(x, y)$ .) |
| 29 | If you roll a standard 6-sided die, what is the probability that you will roll either a 1 or 6? (Express your answer as a common fraction.)   |
| 30 | How many ways can the letters in the word "CAT" be rearranged, including the original arrangement? ("TCA" is one such rearrangement.)   |
| 31 | What is the largest prime number less than 20?  |
| 32 | What is the sum of all possible values of $x$ that satisfy the equation $ x - 3  = 7$ ?   |
| 33 | Two angles of a triangle measure $72^\circ$ and $20^\circ$ . What is the measurement of the third angle, in degrees?  |
| 34 | Find the quotient: $6 \div \frac{3}{7}$   |
| 35 | Solve for $x$ in the following equation: $x + 3 = 2x - 20$  |
| 36 | Find the average of the following numbers: 1, 3, 7, 20, 4   |
| 37 | What is the largest integer, not including 72, that evenly divides 72?  |
| 38 | What is the 16 <sup>th</sup> digit after the decimal point of $4.\overline{3928}$ ?   |
| 39 | It is currently a quarter past 5:00 pm. What time will it be 1.5 hours from now?  |
| 40 | $\frac{3}{5}$ is the average of $x$ and $\frac{1}{5}$ . What is the value of $x$ ?  |
| 41 | You start out facing due north. What direction are you facing after you turn $480^\circ$ to your right and then $300^\circ$ to your left? (Give your answer as a cardinal direction: north, east, south, or west.)  |
| 42 | What are the coordinates of the midpoint of the line segment with endpoints $(1, 2)$ and $(7, 12)$ ?  |
| 43 | What are the coordinates of the $x$ -intercept of the line $3x + 3y = 9$ ?  |
| 44 | In which quadrant is the point $(-2, 5)$ located?   |
| 45 | What is the measure, in degrees, of the smaller angle between the hands of an analog clock at 4:15?   |

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| 46 | Evaluate: $23^2$  |
| 47 | A right triangle has legs of length 5 units and 12 units. What is the length of the hypotenuse of this triangle?  |
| 48 | What is the interior angle measurement of a regular pentagon?   |
| 49 | What is the maximum number of points of intersection between a triangle and a circle?   |
| 50 | Solve for the <b>positive</b> value of $x$ : $(x^2)^3 = 729$  |
| 51 | Inflation causes the cost of a house originally valued at \$100 to inflate by 10%. However, you bought the house for 10% less than its inflated price. How much money did you pay to buy the house? |
| 52 | $x$ is directly proportional to $y$ . If $y = 18$ when $x = 3$ , what is the value of $y$ when $x = 5$ ?  |
| 53 | Compute the sum: $1^2 + 2^2 + 3^2 + \dots + 10^2$   |
| 54 | John drives to work at an average speed of 30 mph. He drives the same route back from work at an average speed of 20 mph. What is his average speed for the entire trip?                            |
| 55 | What is the base 4 number $33_4$ expressed in base 10?  |
| 56 | 60% of 80 is what percent of 40% of 180? (Round your answer to the nearest tenth.)  |
| 57 | I have 10 one-dollar bills to distribute to 4 workers. If each worker must receive at least 1 dollar, in how many different ways can I divide up the 10 dollars?                                    |
| 58 | Simplify the radical: $\sqrt[3]{1512}$  |
| 59 | Find the product: $\left(\frac{1}{2}\right)\left(\frac{2}{3}\right)\left(\frac{3}{4}\right)\dots\left(\frac{2009}{2010}\right)$   |
| 60 | Find the area of the regular octagon with side length 2 units.  |