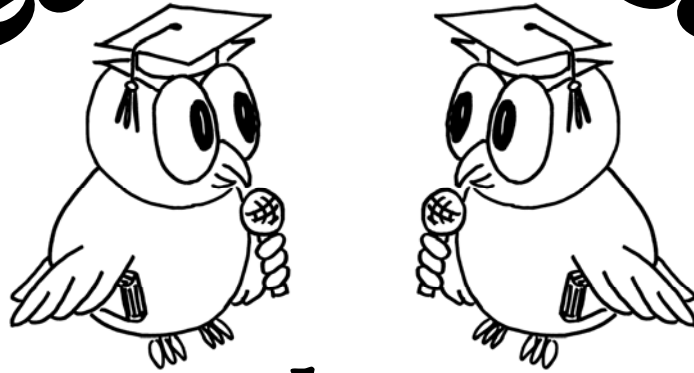


Head to Head



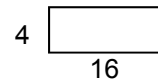
Let's Go!

Math

Practice Test

- 1 If the average temperature is 18° for one week, and the next week forecasters predict it will be 27° lower, what temperature can we expect on a day next week?
- A. 9°
 - B. -27°
 - C. -9°
 - D. 27°
- 2 Which value for x makes this expression true? $3x + 25 = -2x$
- A. -9
 - B. -5
 - C. -7
 - D. -3
- 3 At the mall you buy a sweater and a scarf. The total bill was \$28.56. The sweater cost \$17.95. What equation could you use to find the price of the scarf?
- A. $17.95 + x = 28.56$
 - B. $17.95 - 28.56 = x$
 - C. $28.56 \div x = 17.95$
 - D. $28.56 + 17.95 = x$
- 4 What is the area of a circle that has a radius of 3 in?
- A. 9 in^2
 - B. 3.14 in^2
 - C. 6.28 in^2
 - D. 28.26 in^2
- 5 If you can buy 6 candy bars for \$2.34, how much does it cost to buy 14 candy bars?
- A. \$4.28
 - B. \$5.46
 - C. \$3.12
 - D. \$6.05
- 6 A "dodecahedron" is a solid figure having _____ faces.
- A. 8
 - B. 10
 - C. 12
 - D. 16

7 Which set of dimensions corresponds to a rectangle similar to the rectangle to the right?



- A. 20 x 12
- B. 16 x 32
- C. 8 x 32
- D. 12 x 20

8 $(-28) - (-11) =$

- A. -39
- B. 17
- C. 30
- D. -17

9 Convert to meters / minute: 1.2 kilometers / hour

- A. 120 meters / minute
- B. 60 meters / minute
- C. 20 meters / minute
- D. 85 meters / minute

10 At Washington Middle School, 3 out of 5 students make the honor roll. What is the probability of a student NOT making the honor roll?

- A. 40%
- B. 20%
- C. 30%
- D. 10%





11 Is 15 the mean, median, or mode of this set of data: 7, 7, 7, 19, 11, 14, 20, 30, 15, 20?

- A. Mean
- B. Median
- C. Mode
- D. None of the above

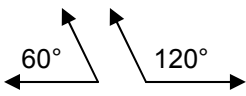
12 Susan takes piano lessons. Each lesson is 30 minutes long and costs \$22.00. How much does Susan have to pay to get 8 hours of lessons?

- A. \$176.00
- B. \$352.00
- C. \$264.00
- D. \$440.00

- 13 If Jane drives 165 miles to see her grandma and arrives there in 3 hours, what is her average speed?
- A. 63 miles per hour
 - B. 55 miles per hour
 - C. 71 miles per hour
 - D. 48 miles per hour
- 14 If you have \$250 in a bank account that earns 3% interest per year, how much simple interest will you have earned in 6 months?
- A. \$8.33
 - B. \$7.50
 - C. \$4.67
 - D. \$3.75
- 15 Which of the following is true?
- A. $5(5-4) = 25 - 5$
 - B. $5(5-4) = 25 - 4$
 - C. $5(5-4) = 25 - 20$
 - D. $5(5-4) = 25 - 9$
- 16 Simplify: $4 \frac{2}{3} \times (\frac{7}{4} + \frac{1}{4})$
- A. $7 \frac{3}{4}$
 - B. $9 \frac{1}{3}$
 - C. $4 \frac{1}{4}$
 - D. $5 \frac{2}{3}$
- 17 If a regular quadrilateral has a perimeter of 32 cm, what is its area?
- A. 64 cm
 - B. 16 cm^2
 - C. 48 cm
 - D. 64 cm^2
- 18 $33 + (-31) =$
- A. 2
 - B. -2
 - C. -64
 - D. 64

- 19 Simplify: $\sqrt{121}$
- A. 12
 - B. 9
 - C. 21
 - D. 11
- 20 Joe is building a swimming pool. On the blueprint for the pool, the scale is 3 in. to every 5 ft. If the length of the pool is 9 in. on the blueprint, how many feet long is the actual pool?
- A. 15 ft.
 - B. 12 ft.
 - C. 14 ft.
 - D. 18 ft.
- 21 What property is demonstrated by the example below?
 $22 \times \frac{1}{22} = 1$
- A. Inverse property of fractions
 - B. Distributive property of multiplication
 - C. Commutative property of fractions
 - D. Inverse property of multiplication
- 22 $- \frac{7}{8} \div 1 \frac{3}{4} =$
- A. $-8 \frac{1}{12}$
 - B. $-\frac{1}{2}$
 - C. $1 \frac{11}{12}$
 - D. $8 \frac{1}{6}$
- 23 Which of the following triangles is scalene?
- A. 
 - B. 
 - C. 
 - D. 
- 24 What natural number is doubled when added to its reciprocal?
- A. 3
 - B. 2
 - C. 1
 - D. $\frac{1}{2}$

- 25 Solve for x : $6/2 = x/8$
- A. 16
 - B. 32
 - C. 24
 - D. 12
- 26 A fruit basket contains 5 apples, 3 bananas, 2 oranges. If you pick a piece of fruit randomly, what are the odds of choosing an orange or a banana?
- A. $3/5$
 - B. $1/2$
 - C. $2/10$
 - D. $2/3$
- 27 George is 2 years older than Mary. If the sum of their ages is 106 years. How old is Mary?
- A. 56
 - B. 54
 - C. 52
 - D. 50
- 28 If it takes you 36.8 minutes to get ready for school each morning and 13.2 minutes to get to school, how much time will you spend getting ready and going to school in 9 days?
- A. 13 hours
 - B. 6 hours and 47 minutes
 - C. 4 hours and 12 minutes
 - D. 7 and $1/2$ hours
- 29 Simplify: $(30m + 12) \times (5m + 8)$
- A. $150m^2 + 20$
 - B. $150m + 96$
 - C. $150m^2 + 300m + 96$
 - D. $150m + 300m^2 + 96$
- 30 Jessica bought a dress that originally costs \$46.00. Sales tax is 6% and she had a 20% off coupon. Approximately how much did she pay for the dress?
- A. \$42.00
 - B. \$39.00
 - C. \$36.00
 - D. \$34.00

- 31 Classify these two angles: 
- A. Complementary
B. Supplementary
C. Complementary and supplementary
D. Neither complementary nor supplementary

- 32 $\frac{3}{4} + \frac{6}{10} =$
- A. $2\frac{9}{10}$
B. $\frac{9}{14}$
C. $1\frac{7}{20}$
D. $\frac{18}{28}$

- 33 Simplify: $(45x + 19y) - (12x + 7y)$
- A. $64x - 19y$
B. $33x - 12y$
C. $64x + 19y$
D. $33x + 12y$

- 34 What is the mode of this set of data: 3, 3, 3, 5, 6, 9, 2, 4, 4, 3, 1, 5, 7?
- A. 4.5
B. 3
C. 2
D. 5.25

- 35 You get 23 out of 27 questions right on a test, what percent did you get? Please round to the nearest percentage.
- A. 91%
B. 89%
C. 83%
D. 85%

- 36 Todd bought 4 baskets of apples. Each basket contained 4.8 pounds of apples. If apples cost \$1.39 per pound, what is the approximate price of the apples?
- A. \$17.00
B. \$24.00
C. \$27.00
D. \$34.00

- 37 What is the number called located on the bottom part of a fraction?
- A. Numerator
 - B. Denominator
 - C. Lower fraction
 - D. Extenuator
- 38 What is 15% of 200?
- A. 45
 - B. 35
 - C. 30
 - D. 20
- 39 What is the cube root of 512?
- A. 8
 - B. 256
 - C. 128
 - D. 12.5
- 40 You are growing a bean plant for science class. If you want to chart the plant's growth for a month, what type of graph would work best for you?
- A. Pie graph
 - B. Line graph
 - C. Bar graph
 - D. Pictograph
- 41 Which value for x makes this expression true? $6x = 5x + 3$
- A. 3
 - B. 5
 - C. 4
 - D. 2
- 42 Convert to yards / minute: 4 feet / second
- A. 20 yards / minute
 - B. 40 yards / minute
 - C. 60 yards / minute
 - D. 80 yards / minute

- 43 Sam has a paper route. On Sundays, he delivers 63 papers, and on the other days, he delivers 52 papers per day. How many papers does Sam deliver in three weeks?
- A. 1,125
 - B. 1,468
 - C. 917
 - D. 1,560
- 44 If you roll a pair of dice, what is the probability of getting a sum of 2?
- A. $\frac{1}{12}$
 - B. $\frac{1}{6}$
 - C. $\frac{1}{36}$
 - D. $\frac{1}{24}$
- 45 Which area of mathematics deals with protractors, segments, and sectors?
- A. Economics
 - B. Calculus
 - C. Ratios
 - D. Geometry
- 46 What is the area of an acute triangle with a base of 15 m and a height of 4 m.
- A. 19 m^2
 - B. 11 m^2
 - C. 60 m^2
 - D. 30 m^2
- 47 If your mom bakes a cake and your brother eats $\frac{1}{3}$ and your sister eats $\frac{1}{4}$, how much cake is left?
- A. $\frac{7}{8}$
 - B. $\frac{5}{12}$
 - C. $\frac{11}{13}$
 - D. $\frac{5}{6}$
- 48 Simplify: $(11x + 3y) \times (3x - 6y)$
- A. $33x^2 - 18y^2$
 - B. $33x^2 - 57xy - 18y^2$
 - C. $14x^2 - 9y$
 - D. $33x^2 + 75xy + 18y^2$

- 49 If you can run 5 miles in 45 minutes, how far can you run in 72 minutes?
- A. 8 miles
 - B. 6 miles
 - C. 9 miles
 - D. 7 miles
- 50 If your savings account pays you interest on both the principal and accrued interest, you are earning _____ interest.
- A. Concentric
 - B. Confound
 - C. Compound
 - D. Complementary

Congratulations!

Thanks for sharpening your
Math skills.

Good luck in competition!

Math Answer Key

Practice Test

	A	B	C	D		A	B	C	D
1			X		26		X		
2		X			27			X	
3	X				28				X
4				X	29			X	
5		X			30		X		
6			X		31		X		
7			X		32			X	
8				X	33				X
9			X		34		X		
10	X				35				X
11	X				36			X	
12		X			37		X		
13		X			38			X	
14				X	39	X			
15			X		40		X		
16		X			41	X			
17				X	42				X
18	X				43	X			
19				X	44			X	
20	X				45				X
21				X	46			X	
22		X			47		X		
23	X				48		X		
24			X		49	X			
25			X		50			X	

Head to Head Answer Sheet

Event _____ Name _____

School _____

	A	B	C	D		A	B	C	D
1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	26	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	27	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	28	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	29	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	30	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	31	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	32	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	33	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	34	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	35	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	36	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	37	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	38	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	39	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	40	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	41	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	42	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	43	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	44	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	45	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	46	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	47	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	48	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	49	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	50	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Score (number correct): _____