

Name _____

1. The distance between Earth and its nearest planetary neighbor, Venus, is 2.6×10^7 miles. Which shows this number?

A 2,670

B 26,000,000

C 260,000,000

D 0.00000026

2. Sixty times the sum of a number n and eight is sixty. Which shows this?

J $6(n+8) = 60$

K $6n + 8 = 60$

L $(6+n) + 8 = 60$

M $6 + 8n = 60$

3. Which would make the inequality true?

$$-1 > \square$$

A 0

B $-1\frac{1}{4}$

C $-1/4$

D $\frac{1}{4}$

4. If $8(10 - n) = 24$, which is n ?

J 2

K 3

L 6

M 7

5. Which expression shows 36 as a product of prime factors?

J $2 \times 2 \times 3 \times 3$

K $3 \times 3 \times 4$

L 12×3

M $2 \times 3 \times 5$

6. What is the value of m in this equation?

$$-4 - (m) = 2$$

J -2

K -6

L -6

M 8

7. What is the value of the expression?

$$(2 \times 3)^2 \times 2$$

A 36

B 48

C 72

D 144

8. Shakespeare used 25, 238 different words in his works. About 2300 of these words had never appeared in writing before. About what percent of Shakespeare's words were new to written English?

J 9%
K 12%

L 28%
M 42%

9. Which expression has a value less than zero?

A $10 - 7$
B $7 - 10$

C $10 - (-7)$
D $7 - (-10)$

10. What value of n makes the equations below true?

$$5 \times 24 = 5 \times (n + 10)$$

A 2
B 4.7

C 12
D 14

11. What is the value of the expression $x^2 + 3y$ when $x = 3$ and $y = 5$?

J 24
K 21

L 17
M 49

12. What is the product of -12 and 5?

A 60
B -7

C -60
D 7

13. The Washington Student Council was planning a field trip to a museum. Forty-eight students planned to go. Two adults would accompany every 8 students. Each van could hold 7 people. How many vans would be needed for the field trip?

A 6
B 8

C 7
D 9

14. Which is the correct answer to..... $20 - 6 \times 3 + 8 \div 2$

J 25
K 21

L 15
M 6

15. What is the sum of -6 and -7?

J 13
K -13

L 42
M 1

Directions: Use the ad below, if needed, to answer question 16 - 20. Do not allow for sales tax.

Garden Shop
Grass Seed Specials

Green Grass Mania

60% rye grass,
40% fescue (by weight)

10,000 pounds covers 1,000 sq. feet
250,000 seeds per pound
50 pounds for \$80
25 pounds for \$45

Super Fly

30% rye grass,
50% fescue,
20% bluegrass (by weight)

10,000 pounds covers 1,000 sq. feet
700,000 seeds per pound
50 pounds for \$130

16. Sue bought seven 50-pound bags of *Green Grass Mania* seed. For the same amount of money, how many bags of *Super Fly* seed could she buy?

J 2
K 3

L 4
M 5

17. Joe spread 20 pounds of *Super Fly* seed on his 2,000 square-foot yard. Which expression gives the approximate number of grass seeds John Spread on his yard?

A $(700,000 \div 2,000) \times 10$
B $(700,000 \times 20) \div 2,000$

C $20 \times 2,000 \times 800,000$
D $20 \times 800,000$

18. Danny bought 50-pounds of grass seed. How large of an area can he cover?

A 200 square feet
B 2,000 square feet

C 5,000 square feet
D 50,000 square feet

19. Jessica bought a 50-pound bag of *Green Grass Mania*. About how many pounds of fescue seed are in the bag?

J 10 pounds
K 20 pounds

L 30 pounds
M 75 pounds

20. For a 50-pound bag, how much more per pound does *Super Fly* cost than *Green Grass Mania*?

J \$1
K \$4

L \$25
M \$50

Tropical Fish Store

Neon Tetras

\$0.79 each

10 or more: \$0.72 each

Angel Fish

3/\$2.40

Fantail Guppies

\$4.50/pair

Japanese Fighting Fish

\$3.50 each

Brine Shrimp

\$3.50/pint

Poseidon Fish Snacks

\$1.29/pack

SPECIAL

FISH TANK GRAVEL

\$3.00/lb

3 lbs or more: \$2.80/lb

21. Jane paid \$13.50 for fantail guppies. How many fantail guppies did she buy?

A 3

B 5

C 6

D 9

22. Nicole and Kim each needed $2\frac{1}{2}$ pounds of gravel. Together, how much would they save by buying and splitting one large bag of gravel instead of buying two separate bags?

J \$0.20

K \$1.00

L \$7.50

M not given

23. Keesha spent \$25.44 for 3 angel fish and a case of Poseidon Fish Snacks. How can you figure how many packs of fish snacks were in the case?

J Divide \$25.44 by 3, then multiply by \$1.29

K Subtract \$2.40 from \$25.44, then divide by \$1.29

L Subtract \$7.20 from \$25.44, then divide by \$1.29

M Divide \$25.44 by 3, then multiply by \$1.29