

Simplify:

1)  $(ab^3)(b^2d)$

2)  $\frac{16g^3}{4g^5}$

1) \_\_\_\_\_

2) \_\_\_\_\_

3)  $a^3 a^6$

4)  $\frac{f^7}{f^2}$

3) \_\_\_\_\_

4) \_\_\_\_\_

Write these numbers using scientific notation.

5) \_\_\_\_\_

5) 23,000,000

6) 0.00036

6) \_\_\_\_\_

Write these numbers using standard notation

7) \_\_\_\_\_

7)  $5.9 \times 10^{-4}$

8)  $5.798 \times 10^9$

8) \_\_\_\_\_

9) In the year 2010, San Diego, CA had a population of about 1,400,000 people.

What is this number in scientific notation?

9) \_\_\_\_\_

a.  $1.4 \times 10^{-6}$

b.  $14 \times 10^{-5}$

c.  $14 \times 10^5$

d.  $1.4 \times 10^6$

Fill in the chart:

Original form	Factored form	Simplified exponent form
$w^3 \cdot 7^3 \cdot w^5$		
$(4m^4)^3$		
$4 \cdot n \cdot n^5 \cdot 5$		
$\frac{8^3 \cdot n^2 \cdot y^5}{8 \cdot n^6 \cdot y}$		
$(k^3 z^5)^2$		
$\frac{c^6 w^3}{cw^5}$		

10. Which of the following shows another way to write 32?

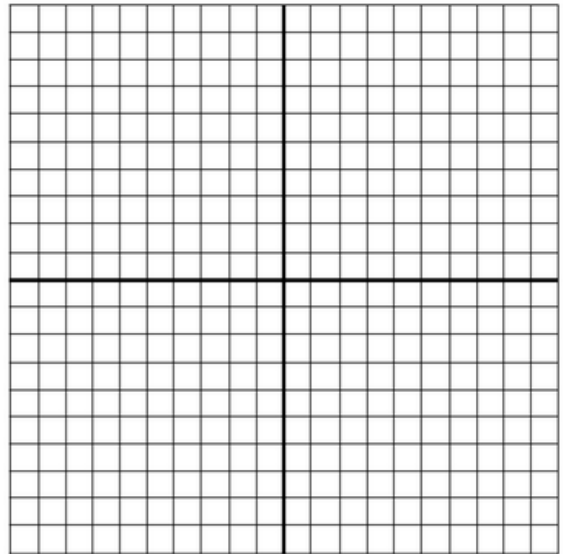
10. \_\_\_\_\_

- A.  $2^5$       B.  $2^6$       C.  $3^4$       D.  $8^4$

11) Graph:  $y = \frac{5}{3}x - 8$

m = \_\_\_\_\_

b = \_\_\_\_\_



12) Graph:

$$y = -\frac{1}{3}x + 4$$

$$y = x - 4$$

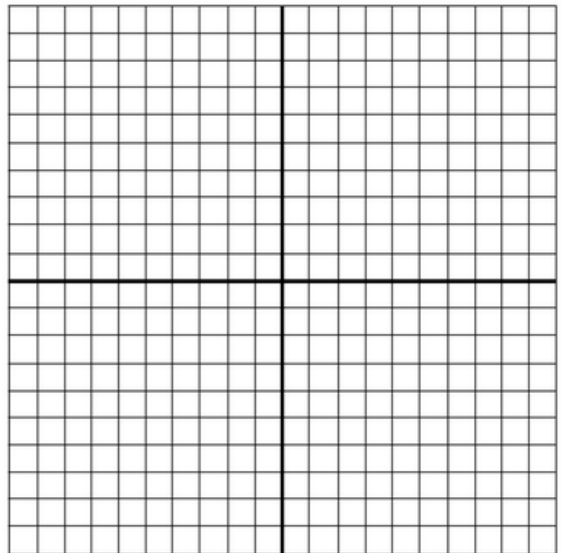
m = \_\_\_\_\_

m = \_\_\_\_\_

b = \_\_\_\_\_

b = \_\_\_\_\_

solution \_\_\_\_\_



Solve:

13)  $6x - 4 = 23$

14)  $6(x - 5) = -18$

13) \_\_\_\_\_

14) \_\_\_\_\_

15)  $4x - 12 = 6x + 6$

16)  $8x - 24 = 8(x - 3)$

15) \_\_\_\_\_

16) \_\_\_\_\_