

Quiz 2a

July 12, 2004

Name _____

Show your work on all problems, and leave your solutions in the simplest form possible.

Convert to scientific notation (2 pts each)

1. $26,000,000 = 2.6 \times 10^7$

2. $(2.35 \times 10^{-4}) \times (3.0 \times 10^6) = 7.05 \times 10^{-4+6} = 7.05 \times 10^2$

Convert to decimal notation (2 pts)

3. $2.35 \times 10^{-4} = 0.000235$

4. Is the ordered pair (0,16) on the line $8(x+2) = 16y$? (2 pts)

$8(x+2) = 16y \rightarrow 8(0+2) \stackrel{?}{=} 16(16) \rightarrow 16 \neq 256$

No

5. Find the slope of the line that passes through the points (1,4) and (3,7). (3 pts)

$$m = \frac{7-4}{3-1} = \frac{3}{2}$$

6. Find the function value $f(-3)$, where $f(x) = 7x - 2$. (2 pts)

$$f(-3) = 7(-3) - 2 = -21 - 2 = -23$$

7. Find the function value $g(2)$, where $g(x) = 7x^2 \div 2|x|$. (3 pts)

$$g(2) = 7(2^2) \div 2|2| = 7 \times 4 \div 2 \times 2 = 7 \times 2 \times 2 = 28$$

8. Write equation of a line with slope -3 and y-intercept (0,2). Graph the line. (4 pts)

$$y = -3x + 2$$

