

Algebra Review #7 SHOW HOW YOU SOLVED EACH PROBLEM

NAME _____

1. Circle all of the following which are examples of rational numbers?

- a) $12.\bar{1}$
- b) $\sqrt{16}$
- c) -3
- d) $\sqrt{64}$
- e) $\frac{5}{8}$
- f) $\sqrt{8}$

2. Solve the equation for a:

$$8.9 + 1.2(3a - 1) = 17.3$$

- A. 2.666...
- B. -2.666...
- C. 2
- D. -2

3. Simplify by using the distributive property and combining like terms:

$5y - 9y + 3p + y$	$-4c - (4c + 1)$
$-9(x + 6) + 4x$	$\frac{2}{3}(6x + 9y)$

4. If $r = 5$ and $s = 1$, what is the value of

$$13[s^6(r - 3 + s)^3 \div 9]$$

5. Solve the equation:

$$6(6 + 7a) = 400 - (-98)$$

6. What is the value of $|5x + 4|$ when $x = -3$.

7. Write in simplest radical form.

$$\sqrt{7} \cdot \sqrt{8}$$

8. Write in simplest radical form.

$$\sqrt{75} \cdot \sqrt{2}$$

H. $5\sqrt{2}$

I. $5\sqrt{6}$

J. $25\sqrt{6}$

K. $2\sqrt{4}$

9. Write in simplest radical form:

$$\sqrt[3]{686}$$

F. $6\sqrt[3]{2}$

G. 7

H. $7\sqrt[3]{2}$

J. $\sqrt[3]{343}\sqrt[3]{2}$

10. Write in simplest radical form.

$$-\sqrt{480r^3}$$