

1. Let  $A = \left\{ \frac{42}{6}, 0, \sqrt{7}, 2\sqrt{5}, -\frac{11}{5}, \sqrt{36}, -8.4, 2\pi \right\}$ .

List the elements of  $A$  that belong to the given set.

a. Natural numbers

b. Rational numbers

c. Irrational numbers

2. Evaluate the expression if  $x = -2$ ,  $y = -1$ , and  $z = 3$ :

$$\frac{-x^2 + 3|y|}{x(y + 2z)}$$

3. Identify the property illustrated. Let  $a$ ,  $b$ , and  $c$  represent any real numbers.

a.  $4(a + b) = 4a + 4b$

b.  $\frac{2}{3} + \left(-\frac{2}{3}\right) = 0$

c.  $5(a + b) = 5(b + a)$

d.  $3(7a) = (3 \cdot 7)a$