

Name: KEY Quiz Score: \_\_\_\_\_ /20**Quiz 6: Version A****Show your reasoning clearly for credit.**

1. A round pizza is half cheese and half pepperoni. It costs \$7.20. George values pepperoni five times as much as cheese.


- (a) Find the value of the cheese half of the pizza, according to George's value system. *Round to the nearest cent.*

let  $x$  be value of cheese half of pizza to George.  
 Then  $5x$  is value of pepperoni half.  
 So  $x + 5x = \$7.20$   
 $6x = \$7.20$   
 $x = \underline{\underline{\$1.20}}$

- (b) Find the value of the pepperoni half of the pizza, according to George's value system. *Round to the nearest cent.*

$$5(1.20) = \underline{\underline{\$6.00}}$$


- (c) Find the value of a  $45^\circ$  pepperoni slice of pizza, according to George's value system. *Round to the nearest cent.*



$$\frac{45^\circ}{180^\circ} = \frac{1}{4}$$

So value is  $\frac{1}{4}(6.00) = \underline{\underline{\$1.50}}$

- (d) Find the value of a  $30^\circ$  cheese slice of pizza, according to George's value system. *Round to the nearest cent.*



$$\frac{30^\circ}{180^\circ} = \frac{1}{6}$$

So value is  $\frac{1}{6}(\$1.20) = \underline{\underline{\$0.20}}$

**Quiz 6: Version B****Show your reasoning clearly for credit.**

1. A round pizza is half cheese and half pepperoni. It costs \$7.50. John values pepperoni four times as much as cheese.

(a) Find the value of the cheese half of the pizza, according to John's value system. *Round to the nearest cent.*

Let  $x$  be the value of cheese half to John.  
 Then  $4x$  is the value of pepperoni half.

$$\text{So } x + 4x = \$7.50$$

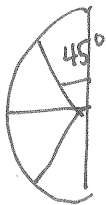
$$5x = \$7.50$$

$$x = \underline{\underline{\$1.50}}$$

(b) Find the value of the pepperoni half of the pizza, according to John's value system. *Round to the nearest cent.*

$$4x = 4(1.50) = \underline{\underline{\$6.00}}$$

(c) Find the value of a  $45^\circ$  pepperoni slice of pizza, according to John's value system. *Round to the nearest cent.*



$$\frac{45^\circ}{180^\circ} = \frac{1}{4}$$

$$\text{So value is } \frac{1}{4}(6.00) = \underline{\underline{\$1.50}}$$

(d) Find the value of a  $30^\circ$  cheese slice of pizza, according to John's value system. *Round to the nearest cent.*



$$\frac{30^\circ}{180^\circ} = \frac{1}{6}$$

$$\text{So value is } \frac{1}{6}(1.50) = \underline{\underline{\$0.25}}$$

**Quiz 6: Version C****Show your reasoning clearly for credit.**

1. A round pizza is half cheese and half pepperoni. It costs \$9.00. Paul values pepperoni four times as much as cheese.

(a) Find the value of the cheese half of the pizza, according to Paul's value system. *Round to the nearest cent.*

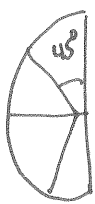
Let  $x$  be the value of the cheese half to Paul.  
Then  $4x$  is the value of the pepperoni half.

$$\begin{aligned} \text{So } x + 4x &= \$9.00 \\ 5x &= 9.00 \\ x &= \underline{\underline{\$1.80}} \end{aligned}$$

(b) Find the value of the pepperoni half of the pizza, according to Paul's value system. *Round to the nearest cent.*

$$4(1.80) = \underline{\underline{\$7.20}}$$

(c) Find the value of a  $45^\circ$  pepperoni slice of pizza, according to Paul's value system. *Round to the nearest cent.*



$$\frac{45^\circ}{180^\circ} = \frac{1}{4}$$

So value is

$$\frac{1}{4}(7.20) = \underline{\underline{\$1.80}}$$

(d) Find the value of a  $30^\circ$  cheese slice of pizza, according to Paul's value system. *Round to the nearest cent.*



$$\frac{30^\circ}{180^\circ} = \frac{1}{6}$$

So value is

$$\frac{1}{6}(\$1.80) = \underline{\underline{\$0.30}}$$

Name: KEY Quiz Score: \_\_\_\_\_ /20**Quiz 6: Version D****Show your reasoning clearly for credit.**

1. A round pizza is half cheese and half pepperoni. It costs \$9.60. Ringo values pepperoni three times as much as cheese.

(a) Find the value of the cheese half of the pizza, according to Ringo's value system. *Round to the nearest cent.*

Let  $x$  be the value of the cheese half to Ringo.  
Then  $3x$  is the value of the pepperoni half.

$$\begin{aligned} \text{So } x + 3x &= \$9.60 \\ 4x &= 9.60 \\ x &= \underline{\$2.40} \end{aligned}$$

(b) Find the value of the pepperoni half of the pizza, according to Ringo's value system. *Round to the nearest cent.*

$$3(2.40) = \underline{\$7.20}$$

(c) Find the value of a  $45^\circ$  pepperoni slice of pizza, according to Ringo's value system. *Round to the nearest cent.*

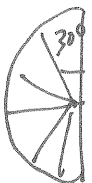


$$\frac{45^\circ}{180^\circ} = \frac{1}{4}$$

So value is

$$\frac{1}{4}(7.20) = \underline{\$1.80}$$

(d) Find the value of a  $30^\circ$  cheese slice of pizza, according to Ringo's value system. *Round to the nearest cent.*



$$\frac{30^\circ}{180^\circ} = \frac{1}{6}$$

So value is

$$\frac{1}{6}(2.40) = \underline{\$0.40}$$