1.6 Properties cont'd

p. 28

9-25-17

Sep 26-12:39 PM

You can use the Distributive Property to multiply numbers mentally by breaking apart one of the numbers and writing it as a sum or difference.

Distributive Property		
Numbers	$6 \cdot (9 + 14) = 6 \cdot 9 + 6 \cdot 14$	$8 \cdot (5 - 2) = 8 \cdot 5 - 8 \cdot 2$
Algebra	$a \cdot (b + c) = ab + ac$	$a \cdot (b - c) = ab - ac$

$6(9+14)$

$6 \cdot 9$

$6 \cdot 14$

$8(5-2)$

$40 - 16 = 24$

Sep 26-12:40 PM

Use the Distributive Property to find 6(54).

Method 1:

$6(54) = 6(50 + 4)$ *Rewrite 54 as 50 + 4.*

$= (6 \bullet 50) + (6 \bullet 4)$ *Use the Distributive Property.*

$= 300 + 24$ *Multiply.*

$= 324$ *Add.*

Method 2:

$6(54) = 6(60 - 6)$ *Rewrite 54 as 60 – 6.*

$= (6 \bullet 60) - (6 \bullet 6)$ *Use the Distributive Property. Multiply.*

$= 360 - 36$

$= 324$ *Subtract.*

Sep 26-12:40 PM

Use the Distributive Property to find 8(19).

$8(19) = 8(10+9)$

$8(20-1)$

$160 - 8$

152

$80 + 72$

152

Sep 26-12:41 PM

Use the Distributive Property to find each product.

6(17)

$6 \bullet (12 + 5) = 6(12 + 5)$

$72 + 30 = 102$

$(20 - 7) \bullet 9 = 180 - 63 = 117$

$\begin{array}{r} 180 \\ -\ 63 \\ \hline \end{array}$

Sep 26-12:41 PM

Use the Distributive Property to find each product.

$5(18) = 5(10 + 8)$

$50 + 40 = 90$

$6(29) = 6(20 + 9)$

$120 + 54 = 174$

Sep 26-1:22 PM