

## MAT0028 ~ Lesson 7

Work the following examples as you listen to the recorded lecture.

### Properties of Real Numbers

Properties	
1. Commutative property of addition:	$x + 2 = 2 + x$
2. Commutative property of multiplication:	$x \cdot 2 = 2 \cdot x$
3. Associative property of addition:	$2 + (7 + y) = (2 + 7) + y$
4. Associative property of multiplication:	$2 \cdot (x \cdot y) = (2 \cdot x) \cdot y$
5. Distributive property of multiplication:	$3(y + 6) = 3 \cdot y + 3 \cdot 6$

Example 1:  $(r + 3) + 11$

Example 2:  $2(42x)$

Example 3:  $\frac{1}{8}(8z)$

Example 4:  $7(a + b)$

Example 5:  $5(7 + 8y)$

Example 6:  $\frac{1}{2}(6x + 8)$

Example 7:  $3(2r + 5) - 7$

Example 8:  $-4(4x + 5) - 5$

Example 9:  $9a + 9b$