

Name

Class: 603

Date: 5/15/14

**Directions:** Determine if these expressions are equivalent to our target expression. Use mathematical evidence to support your answer and write yes or no. **BONUS:** Write what property you can use to support your answer.

1.  $2n + 2$

yes

4.  $2(n + 1)$

NO

7.  $3n + 5 - n - 3$

yes

2.  $n + n + 1 + 1$

yes

5.  $2(n + 2)$

NO

8.  $n + 1 - n - 1$

NO

3.  $n^2 + 2$

NO  
 $5 \times 5 = 2$ 

6.  $2(n + 2) - 2$

yes

9.  $3(n + 1) - n - 1$

yes

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1.  $2n + 2$

yes

4.  $2(n + 1)$

yes  
distributive

7.  $(3n + 5) - n - 3$

no

2.  $n + n + 1 + 1$

 $2n + 2$ 

5.  $2(n + 2)$

no

8.  $n + 1 - n - 1$

no

3.  $n^2 + 2$

yes  
no

6.  $2(n + 2) - 2$

distributive  
property  
 $2n + 4 - 2$   
 $6n - 2$   
 $4n$ 

9.  $3(n + 1) - n - 1$

 $3n + 3 - n - 1$ 

no

distributive

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$2n+2$

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1.  $2n + 2$  yes ✓

4.  $2(n + 1)$  yes ✓

7.  $(3n) + 5 - n - 3$

2.  $n + n + 1 + 1$  yes ✓  
 $n+n$   $2n$

5.  $2(n + 2)$  no ✓  
 $2n + 4$

8.  $n + 1 - n - 1$  NO

3.  $n^2 + 2$   
no ✓

6.  $2(n + 2) - 2$  yes  
yes  $4 - 2$

9.  $3(n + 1) - n - 1$  yes  
yes

Can't multiply a variable

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1.  $2n + 2$   
Yes

4.  $2(n + 1)$   
 $2n + 2$   
Yes

~~7.  $3n + 5 - n - 3$~~   
NO Yes

2.  $n + n + 1 + 1$   
 $2n + 2$   
Yes

5.  $2(n + 2)$   
 $2n + 4$   
NO

8.  $n + 1 - n - 1$   
NO

3.  $n^2 + 2$   
NO

6.  $2(n + 2) - 2$   
 $2n + 4 - 2$   
 $2n + 2$   
Yes

~~9.  $3(n + 1) - n - 1$~~   
yes ~~NO~~  
 ~~$3n + 3 - n - 1$~~   
 ~~$2n + 2$~~

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Class: [redacted]

Date: [redacted]

Directions: Determine if these expressions are equivalent to our target expression. Use mathematical evidence to support your answer and write yes or no. BONUS: Write what property you can use to support your answer.

1.  $2n + 2$

yes

4.  $2(n + 1)$

$4 + 2 = 6$   
yes

7.  $3n + 5 - n - 3$

yes

2.  $n + n + 1 + 1$

yes

5.  $2(n + 2)$

no

8.  $n + 1 - n - 1$

no

3.  $n^2 + 2$

no

6.  $2(n + 2) - 2$

yes

9.  $3(n + 1) - n - 1$

yes

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Directions: Determine if these expressions are equivalent to our target expression. Use mathematical evidence to support your answer and write yes or no. BONUS: Write what property you can use to support your answer.

1.  $2n + 2$

$1 + 2 \times 2 = 4$

$2n + 2$

4.  $2(n + 1)$

$1 + 1 = 2 \times 2 = 4$

$2n + 2$

7.  $3n + 5 - n - 3$

$1 \times 3 = 3 + 5 = 8 - 3 = 4$

$3n + (5 - n) - 3$

2.  $n + n + 1 + 1$

$1 + 1 + 1 + 1 = 4$

$n + 2$

5.  $2(n + 2)$

$1 + 2 = 3 \times 2 = 6$

$2n + 4$

8.  $n + 1 - n - 1$

$1 + 1 - 1 - 1 = 0$

$-n + -1$

3.  $n^2 + 2$

$1 + 2 = 3$

$n^2 + 2$

6.  $2(n + 2) - 2$

$1 + 2 = 3 \times 2 = 6 - 2 = 4$

$2n + 2$

$2n + 4$   
 $-2$   
 $2n + 2$

9.  $3(n + 1) - n - 1$

$1 + 1 = 2 \times 3 = 6 - 1 = 5$

$3n + 2$

$3n + 3$   
 $-1$   
 $-2 + 2 = 4$

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Directions: Determine if these expressions are equivalent to our target expression. Use mathematical evidence to support your answer and write yes or no. BONUS: Write what property you can use to support your answer.

1.  $2n + 2$

Yes b/c  $2n+2$  is equivalent to  $2n+2$ .

4.  $2(n + 1)$

Yes b/c if you use the distributive property you can get the same expression.

7.  $(3n + 5) - n - 3$

Yes

$8 - 1 = 7 - 3 = 4$

2.  $n + n + 1 + 1$

Yes b/c  $2n+2$  can be expanded by adding the #1s and adding 2.

5.  $2(n + 2)$

No b/c by using the distributive property you will see that you plus in #1s that won't give you the correct answer.

8.  $n + 1 - n - 1$

NO

3.  $n^2 + 2$

No b/c if you multiply the # of the shape twice, and add 2, you will not get the correct answer.

6.  $2(n + 2) - 2$

$2+4=6-2=4$   
Yes

9.  $3(n + 1) - n - 1$

Yes

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1.  $2n + 2$

Yes

4.  $2(n + 1)$

Yes

$3 \times 2 + 5 - 2 - 3 = 6 + 5 - 2 - 3 = 6$   
7.  $(3n) + 5(-n) - 3$   
Yes

2.  $n + n + 1 + 1$

Yes

5.  $2(n + 2)$

NO

8.  $n + 1 - n - 1$

NO

3.  $n^2 + 2$

NO

6.  $2(n + 2) - 2$

Yes

9.  $3(n + 1) - n - 1$

Yes