



Name: \_\_\_\_\_

Date: \_\_\_\_\_

## **Determine whether the expressions are equivalent.**

*Solve for  $x$ . Show your work.*

1. Are  $2(x + 4)$  and  $2x + 8$  equivalent?
2. Are  $6(x + 3)$  and  $6x + 18$  equivalent?
3. Are  $7(x + 7)$  and  $7x + 49$  equivalent?
4. Are  $4(x + 6)$  and  $4x + 24$  equivalent?
5. Are  $2(x + 7)$  and  $2x + 14$  equivalent?
6. Are  $4(x + 6)$  and  $4x + 24$  equivalent?
7. Are  $4(x + 5)$  and  $4x + 20$  equivalent?
8. Are  $6(x + 2)$  and  $6x + 12$  equivalent?



# Determine whether the expressions are equivalent. – Answer Key

1. Are  $2(x + 4)$  and  $2x + 8$  equivalent?

Yes

2. Are  $6(x + 3)$  and  $6x + 18$  equivalent?

Yes

3. Are  $7(x + 7)$  and  $7x + 49$  equivalent?

Yes

4. Are  $4(x + 6)$  and  $4x + 24$  equivalent?

Yes

5. Are  $2(x + 7)$  and  $2x + 14$  equivalent?

Yes

6. Are  $4(x + 6)$  and  $4x + 24$  equivalent?

Yes

7. Are  $4(x + 5)$  and  $4x + 20$  equivalent?

Yes

8. Are  $6(x + 2)$  and  $6x + 12$  equivalent?

Yes