Simplify and Evaluate Expressions- *In Class*

**1.** Evaluate if x = 50. 

**2.** Simplify: ![https://media.studyisland.com/cgi-bin/mimetex.cgi?7\sqrt%7b54%7d](data:None;base64...)- ![https://media.studyisland.com/cgi-bin/mimetex.cgi?3\sqrt%7b24%7d](data:None;base64...)

**3.** Evaluate if *x* = -11 & *y* = -11. ![https://media.studyisland.com/cgi-bin/mimetex.cgi?\mid%208x%5e%7b6%7d%20\%20-%20\%209y%20\mid](data:None;base64...)

**4.** ![https://media.studyisland.com/cgi-bin/mimetex.cgi?2%5e%7b2%7d\%20\cdot\%202%5e%7b5%7d](data:None;base64...)

**5.** Simplify: 2(14 - |-9 + 2|) - |8 - 3|2

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**6.** ![https://media.studyisland.com/cgi-bin/mimetex.cgi?4%5e%7b0%7d](data:None;base64...)

**7.** ![https://media.studyisland.com/cgi-bin/mimetex.cgi?\left(3%5e%7b3%7d\right)%5e%7b0%7d](data:None;base64...)

**8.** Evaluate if *n* = 2. |*n* - 8| - |2 - *n*|

**9.** ![https://media.studyisland.com/cgi-bin/mimetex.cgi?\frac%7b3%5e%7b3%7d%7d%7b4%5e%7b3%7d%7d](data:None;base64...)

**10.** Evaluate if *n* = 3. |2*n* - 7| + |-4|

**11.** Evaluate if *x* = -5 and *y* = 25. ![https://media.studyisland.com/cgi-bin/mimetex.cgi?\frac%7b5\mid%20x%20\mid%20\%20-%20\%20y%5e%7b2%7d%7d%7bx%7d](data:None;base64...)

**12.** Evaluate if *x* = 30. ![https://media.studyisland.com/cgi-bin/mimetex.cgi?\frac%7b\sqrt%7bx%20\%20-%20\%205%7d%7d%7b25%7d](data:None;base64...)

**13.** ![https://media.studyisland.com/cgi-bin/mimetex.cgi?11%5e%7b-3%7d](data:None;base64...)

**14.** Evaluate if m = 4. 

**15.** Simplify: ![https://media.studyisland.com/cgi-bin/mimetex.cgi?5\sqrt%7b7%7d](data:None;base64...)+ ![https://media.studyisland.com/cgi-bin/mimetex.cgi?3\sqrt%7b63%7d](data:None;base64...)

**16.** Simplify: ![https://media.studyisland.com/cgi-bin/mimetex.cgi?5\sqrt%7b54%7d](data:None;base64...)- ![https://media.studyisland.com/cgi-bin/mimetex.cgi?5\sqrt%7b24%7d](data:None;base64...)

**17.** Evaluate if z = 65. 

**18.** Evaluate if z = 362. 

**19.** Simplify: (|-8 - 5| + 2)2

**20.** ![https://media.studyisland.com/cgi-bin/mimetex.cgi?\sqrt%7b32%7d\:%20\times%20\:5\sqrt%7b2%7d\%20=\%20?](data:None;base64...)

# Answers

1. ![https://media.studyisland.com/cgi-bin/mimetex.cgi?32](data:None;base64...)

2. ![https://media.studyisland.com/cgi-bin/mimetex.cgi?15\sqrt%7b6%7d](data:None;base64...)
3. ![https://media.studyisland.com/cgi-bin/mimetex.cgi?14172587](data:None;base64...)
4. ![https://media.studyisland.com/cgi-bin/mimetex.cgi?2%5e%7b7%7d](data:None;base64...)

5. -11
6. ![https://media.studyisland.com/cgi-bin/mimetex.cgi?1](data:None;base64...)

7. ![https://media.studyisland.com/cgi-bin/mimetex.cgi?1](data:None;base64...)

8. 6
9. ![https://media.studyisland.com/cgi-bin/mimetex.cgi?\left(\frac%7b3%7d%7b4%7d\right)%5e%7b3%7d](data:None;base64...)

10. 5
11. ![https://media.studyisland.com/cgi-bin/mimetex.cgi?120](data:None;base64...)
12. ![https://media.studyisland.com/cgi-bin/mimetex.cgi?\frac%7b1%7d%7b5%7d](data:None;base64...)
13. ![https://media.studyisland.com/cgi-bin/mimetex.cgi?\frac%7b1%7d%7b11%5e%7b3%7d](data:None;base64...)

14. ![https://media.studyisland.com/cgi-bin/mimetex.cgi?7](data:None;base64...)

15. ![https://media.studyisland.com/cgi-bin/mimetex.cgi?14\sqrt%7b7%7d](data:None;base64...)
16. ![https://media.studyisland.com/cgi-bin/mimetex.cgi?5\sqrt%7b6%7d](data:None;base64...)
17. ![https://media.studyisland.com/cgi-bin/mimetex.cgi?53](data:None;base64...)

18. ![https://media.studyisland.com/cgi-bin/mimetex.cgi?142](data:None;base64...)

19. 225
20. ![https://media.studyisland.com/cgi-bin/mimetex.cgi?40](data:None;base64...)