

LT 4.1 Skills Practice #1

Complex Numbers with Radicals

Simplify

1) $\sqrt{32}$

2) $\sqrt{45}$

3) $\sqrt{180}$

4) $\sqrt{525}$

5) $\sqrt{11} \times \sqrt{5} =$

6) $\sqrt{6} \times \sqrt{6} =$

7) $2\sqrt{5} \times \sqrt{7} =$

8) $54 \times 2\sqrt{6}$

9) $\sqrt{\frac{49}{4}}$

10) $\sqrt{\frac{1}{4}}$

11) $\frac{\sqrt{24}}{\sqrt{3}} =$

12) $\frac{6\sqrt{30}}{2\sqrt{5}} =$

13. $\sqrt{52x^3y^5}$

14. $\sqrt{-108x^7}$

15. $\sqrt{-81x^6}$

16. $\sqrt{-23} \cdot \sqrt{-46}$

17. $(3i)(-2i)(5i)$

18. i^{11}

19. i^{65}

20. $(7 - 8i) + (-12 - 4i)$

21. $(-3 + 5i) + (18 - 7i)$

22. $(10 - 4i) - (7 + 3i)$

23. $(7 - 6i)(2 - 3i)$

24. $(3 + 4i)(3 - 4i)$

25. $\frac{8 - 6i}{3i}$

26. $\frac{3i}{4 + 2i}$