

NAME _____ **DATE** _____ **PER.** _____

OPERATIONS WITH RADICALS

Simplify.

1. $\sqrt{320} =$

2. $-7\sqrt{25} =$

3. $6\sqrt{\frac{36}{196}} =$

4. $\sqrt{108h^9} =$

5. $\sqrt{180k^6} =$

6. $\sqrt{10} + 3\sqrt{10} - \sqrt{5}$

7. $\sqrt{20} + \sqrt{80} - \sqrt{45} =$

8. $\sqrt{128} + \sqrt{50} =$

9. $14\sqrt{3} + 6\sqrt{2} - 11\sqrt{3} =$

10. $2\sqrt{6} \cdot \sqrt{8} =$

11. $\frac{3}{\sqrt{3}} =$

12. $\frac{\sqrt{60}}{\sqrt{5}} =$

13. $\frac{4\sqrt{3}}{\sqrt{8}} =$

14. $\sqrt{\frac{5}{6}} =$

Answers in random order: $6h^4\sqrt{3h}$, $3\sqrt{3} + 6\sqrt{2}$, $2\sqrt{3}$, $8\sqrt{5}$, $3\sqrt{5}$, -35 , $\sqrt{3}$, $\sqrt{6}$, $\frac{18}{7}$,
 $6k^3\sqrt{5}$, $\frac{\sqrt{30}}{6}$, $4\sqrt{10} - \sqrt{5}$, $13\sqrt{2}$, $8\sqrt{3}$