

LEVEL: EMERGING

Directions: Completely simplify the following radicals.

1) $\sqrt{\frac{3}{50}}$

2) $\sqrt{\frac{7}{72}}$

3) $\frac{\sqrt{5}}{\sqrt{10}}$

4) $\sqrt{\frac{3a^3}{2a^2}}$

5) $\frac{\sqrt{29x^8}}{\sqrt{x^5}}$

6) $\sqrt{\frac{49x^5}{x^3}}$

7) $\frac{2}{\sqrt{7x}}$

8) $\frac{\sqrt{5k}}{\sqrt{3k^2}}$

9) $\frac{\sqrt{49m^5}}{\sqrt{121}}$

LEVEL: PROFICIENT

Directions: Completely simplify the following radicals.

10) $\sqrt{\frac{49x^5}{x^3}}$

11) $\sqrt{\frac{2n^2}{5n^4}}$

12) $\frac{\sqrt{2x^2}}{\sqrt{5x^3}}$

13) $\sqrt{\frac{20a^3}{12a^4}}$

14) $\sqrt{\frac{363}{25x}}$

15) $\sqrt{\frac{10x^2}{7x^3}}$

16) $\frac{\sqrt{2x}}{\sqrt{2x^4}}$

17) $\frac{1}{\sqrt{18y^3}}$

18) $\frac{\sqrt{250m^3}}{\sqrt{2n^4}}$

LEVEL: MASTERY

Directions: Completely simplify the following radicals.

19) $\sqrt{\frac{162x^4}{2x^2}}$

20) $\frac{\sqrt{4v^2}}{\sqrt{12v^3}}$

21) $\sqrt{\frac{4x^2y^2}{5x^3y^2}}$

22) $\frac{\sqrt{9n}}{15n^3}$

23) $\frac{12}{\sqrt{3x^2}}$

24) $\frac{\sqrt{10x^4y^4}}{\sqrt{120x^2y^2}}$

Worksheet 1.2B Answers

1. $\frac{\sqrt{6}}{10}$

2. $\frac{\sqrt{14}}{2}$

3. $\frac{12}{\sqrt{2}}$

4. $\frac{\sqrt{6a}}{2}$

5. $x\sqrt{29x}$

6. $7x$

7. $\frac{2\sqrt{7x}}{7x}$

8. $\frac{\sqrt{15k}}{3k}$

9. $\frac{7m^2\sqrt{m}}{11}$

10. $7x$

11. $\frac{\sqrt{10}}{5n}$

12. $\frac{\sqrt{10x}}{5x}$

13. $\frac{\sqrt{15a}}{3a}$

14. $\frac{11\sqrt{3x}}{5x}$

15. $\frac{\sqrt{70x}}{7x}$

16. $\frac{\sqrt{6x}}{3x^2}$

17. $\frac{\sqrt{2y}}{6y^2}$

18. $\frac{5m\sqrt{5m}}{n^2}$

19. $9x$

20. $\frac{\sqrt{3v}}{3v}$

21. $\frac{2\sqrt{5x}}{5x}$

22. $\frac{\sqrt{15}}{5n}$

23. $\frac{4\sqrt{3}}{x}$

24. $\frac{xy\sqrt{3}}{6}$