

Name: _____

M\$3A Homework 37

1. Simplify: $-5\sqrt{24}$	9. Simplify: $\frac{4 + \sqrt{8}}{2}$
2. Simplify: $-\sqrt{128}$	10. Simplify: $\frac{-5 - \sqrt{50}}{5}$
3. Simplify: $\sqrt{\frac{5}{9}}$	11. Simplify: $\frac{\sqrt{7} - 1}{\sqrt{7}}$
4. Simplify: $10\sqrt{\frac{3}{5}}$	12. Simplify: $\frac{4\sqrt{3} + 2}{\sqrt{3}}$
5. Simplify: $\frac{5}{3}\sqrt{\frac{9}{50}}$	13. Simplify: $\frac{30}{\sqrt{50}}$
6. Simplify: $15\sqrt{\frac{1}{3}}$	14. Simplify: $\frac{27 - \sqrt{45}}{\sqrt{27}}$
7. Simplify: $8\sqrt{\frac{5}{8}}$	15. Simplify: $\frac{\sqrt{8} + \sqrt{18}}{\sqrt{2}}$
8. Simplify: $\frac{4\sqrt{48}}{8\sqrt{3}}$	16. Simplify: $\frac{6\sqrt{27} + 12\sqrt{15}}{3\sqrt{3}}$

17. Eva is a tap dancer who practices at Miss Step's Dance Studio, which has a square dance floor consisting of 1-foot by 1-foot square tiles. Eva prefers a rectangular dance floor, so (after obtaining Miss Step's approval) she changes the floor into a rectangle by re-arranging the square tiles. The length of the new rectangular floor is 3 feet longer than the original square floor and the width is 2 feet shorter. What was the length of a side of the original square dance floor?

18. Howard and Edward, working together, can complete a job in 12 hours. Edward requires 18 hours to do this job alone. Howard and Edward start the job. After they worked for 4 hours, Howard left the job. How many hours will Edward require to finish the job working alone?