

Essential Mathematics Review Quiz

Name _____ SID _____

1. Find the *order of magnitude*: $\frac{(0.002)(1138)}{(238)(0.07)} \sim$

2. Find an *approximate* answer: $\frac{(218)(27)}{(0.3)(23)} \approx$

3. Solve: $x - 2 = 9x$

4. Solve: $y^2 - 36 = 0$

5. Factor: $y^2 - 3 = 0$

6. Expand: $(2x + 3)(x + 1) = 0$

7. Factor: $z^2 + 4z + 4 = 0$

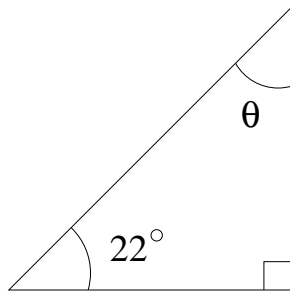
8. Expand: $(3y + 5)(y - 2) = 0$

9. Solve: $q^2 - 2q - 1 = 0$

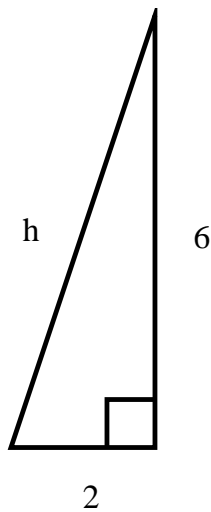
10. Solve: $2r - \frac{1}{1+r} = 0$

11. Solve: $2 = \log x^2$

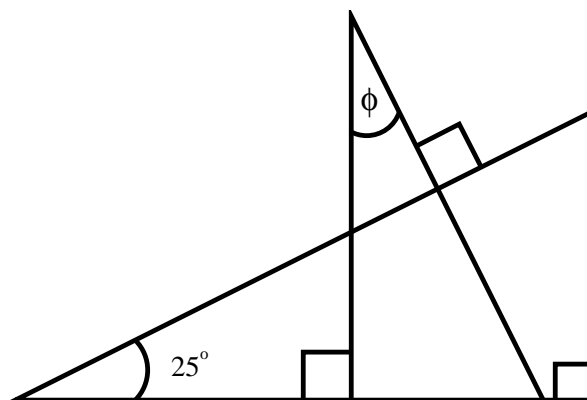
Solve the following triangles:



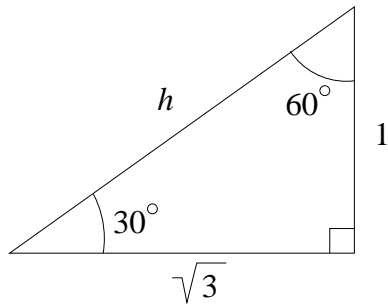
12. What is the value of θ ?



13. What is the value of h ?

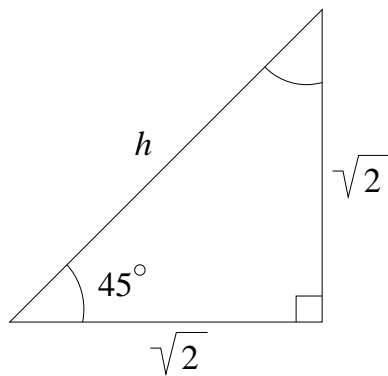


14. What is the value of ϕ ?



15. Find: $h =$

16. Find: $\cos 30^\circ =$



17. Find: $h =$

18. Find: $\sin 45^\circ =$

19. Reduce: $\frac{x^3 - x}{x^2 - x} =$

20. Solve $3C - V = 0$ and $V + C = 1$ for C and V .