

Math 10 Midterm review #4

1. Simplify $(5x^7y^{-3})^2$
2. If a plane travels for 80 km on a bearing of 310, how far North did the plane travel?
3. Simplify: $3(x + 4)(x - 7)$
4. What is the angle of elevation of the sun when a 6 ft person casts an 80 cm shadow?
5. A square has a perimeter of $(8x - 12)$, write an expression for its area?
6. List all the groups each number belongs: rational, irrational, real, natural, whole, integer
 - a. 6
 - b. $\frac{1}{2}$
 - c. -2.8
 - d. $\sqrt{90}$
7. Factor completely:
 $x^2 + 10x + 16$
 $2x^2 + 10$
 $x^2 - 64$
 $2x^2 + 16x + 30$
8. Determine the x and y intercepts for the relation $3x - 5y = 12$
9. What is the algebraic rule for the following relation: 7, 4, 1, ... ? Is -66 a number in this pattern?
10. What is the difference between a whole number and an integer? What is similar?