

**Subject: Math Revision Worksheet**

**Grade:** \_\_\_\_\_ **Student's Name:** \_\_\_\_\_ **Date:** Dec. \_\_\_\_\_, 2025

**Educational Outcome:** to reinforce understanding of previously learned mathematical concepts

**1. Factorize the following:**

a)  $4m(m+3) - 5(m+3)$

b)  $(3y+2)^2 - 16$

c)  $5a^2 - 20$

d)  $9p^2 - 6p + 1$

**2. Expand and simplify the following:**

a)  $6p(4q-3p) - 5q(3p+q)$

b)  $(3x+y)(2x-y)$

c)  $(5a-3b)^2$

d)  $-2m(4n+6p) + 3p(5m-2n)$

e)  $(6x-3y)(6x+3y)$

**3. Simplify the following.**

a)  $\frac{8x^3}{3} \times \frac{9}{4x}$

b)  $\frac{x^2 - 16}{2x} \div \frac{x - 4}{x}$

c)  $\frac{x^2 + 2x}{x^2 - 4} \times \frac{x - 2}{x + 2}$

**4. Solve the following equations.**

a)  $3(2x - 5) = 21$

b)  $8 - 3(x + 2) = 5$

c)  $\frac{-x + 1}{4} = \frac{2x - 3}{8}$

d)  $\frac{5}{x + 3} = \frac{7}{x - 2}$

**5. Sarah earns \$20 for every hour she works. After working for a certain number of hours, she has earned \$400. How many hours did she work?**

**6. The area of a triangle is  $\frac{2x^2+6x}{x+3}$  . and its height is  $\frac{x+2}{x+3}$  . What is the base of the triangle?**