

Math 111 Skills Test - Practice

1. Solve:  $2(5x - 9) = -38$

2. Solve:  $\frac{2x+2}{3} + \frac{x-2}{4} = \frac{15}{2}$

3. Evaluate:  $(-5)^0$

4. Simplify:  $\frac{1}{3^{-4}}$

5. Simplify (positive exponents only):  $\frac{40a^3b^9}{8a^5b^5}$

6. Simplify (positive exponents only):  $\left(\frac{x^6}{y^{-2}}\right)^5$

7. Expand:  $(2p - 4k)(5p - 3k)$

8. Factor:  $4n^2 + 23n + 15$

9. Simplify  $\frac{5}{27} + \frac{5}{6}$

10. Factor:  $u^2 - 25$

Math 111 Skills Test – Practice (answers)

1.  $x = -2$

2.  $x = 8$

3. 1

4. 81

5.  $\frac{5b^4}{a^2}$

6.  $x^{30}y^{10}$

7.  $10p^2 - 26kp + 12k^2$

8.  $(4n + 3)(n + 5)$

9.  $\frac{55}{54}$

10.  $(u - 5)(u + 5)$