

## Test A – Private and Personal Evaluation

Please give yourself up to 30 minutes to answer these questions. The test is only meaningful if you do not use a calculator, so please, no calculator. After completing the test, check your answers against those on the other side of this page.

1. Add the following:  $3\frac{1}{4} + \frac{2}{3}$ .

2. Round off to the nearest integer:  
 $-3.4958$ .

3. Evaluate:  $18 \cdot (3 + 27) - 132 \div 6$ .

4. If  $x = 3$  and  $y = -2$ , then evaluate the following expression:

$$-x^2 + y - 7(x + y).$$

5. Solve the following equation.

$$-3x + 15 = 8 + 11x.$$

6. Simplify:  $4x - (6 + 3x - x^2) - (-x)^2$ .

7. Expand:  $(a + 3b)^2$ .

8. Simplify:  $(-2x^4)(-2x)^4$ .

9. Factor:  $2x^2 - 50$ .

10. Solve:  $t^2 + 3t - 10 = 0$ .

11. Solve the inequality:  $-4x + 1 < 0$ .

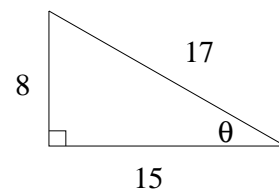
12. Find the slope of the line passing through the points  $(2, 1)$  and  $(4, 7)$ .

13. What is the  $y$ -intercept of the graph of  $y = \frac{2}{3}x - 4$ ?

14. The graph of the following function is a parabola. Where is the vertex located?

$$y = 2(x + 1)^2 - 6$$

15. What is  $\tan \theta$ ?



Turn over to check your answers.

## Answers to Test A

1.  $\frac{47}{12}$  or  $3\frac{11}{12}$
2.  $-3$
3.  $518$
4.  $-18$
5.  $\frac{1}{2}$
6.  $x - 6$
7.  $a^2 + 6ab + 9b^2$
8.  $-32x^8$
9.  $2(x - 5)(x + 5)$
10.  $t = -5, t = 2$
11.  $x > \frac{1}{4}$
12.  $3$
13.  $-4$  or  $(0, -4)$
14.  $(-1, -6)$
15.  $\frac{8}{15}$

If your score is less than 8, you will benefit from reviewing some basic math concepts before the Math Readiness camp begins. One way you can review is by attending the Math Readiness preliminary workshop; another would be by working on your own. A web page about the preliminary workshop, including a basic description of the content it covers, is located at:

<http://math.usask.ca/mrc-info/workshop.html>

You will be able to register for the workshop through the web page. If you are interested in attending the workshop, but can't register through the web, please contact Holly Fraser at [fraser@math.usask.ca](mailto:fraser@math.usask.ca) or (306) 966-6092.

Now please go on to Test B, which follows.