

# BASIC MPT MATERIALS

## For Placement into Math 097, 101, 190

Review Material	Location
<p><b>1. Web site</b></p> <p>General MPT information.</p> <p>Sample questions and answers that highlight the most important topic areas covered in the Math Placement Test.</p> <p>Links to other sites with review material.</p>	<p><a href="http://www.capilano.ca/math/Math-Placement-Test-(MPT)/">http://www.capilano.ca/math/Math-Placement-Test-(MPT)/</a></p> <p><a href="http://www.capilano.ca/math/Math-Placement-Test-(MPT)/#what-can-prepare">http://www.capilano.ca/math/Math-Placement-Test-(MPT)/#what-can-prepare</a></p>
<p><b>2. Texts</b></p> <p><i>Essential Mathematics with Applications</i> by L. Trivieri</p> <p><i>Developmental Mathematics</i> by M. Bittinger and J. Beecher.</p> <p><i>Integrated Arithmetic and Algebra</i> B. Jordan and W. Palow.</p> <p><i>Arithmetic and Algebra</i> by Rosanne Proga.</p> <p><i>Prealgebra: A Worktext</i> by D. Franklin Wright.</p>	<p>On reserve in Library under MPT.</p> <p>On reserve in Library under MPT.</p> <p>On reserve in Library under MPT.</p> <p>On reserve in Math Learning Centre (BR 289).</p> <p>On reserve in Math Learning Centre (BR 289).</p>
<p><b>3. Audio-Visual (and accompanying resources)</b></p> <p><i>The Video Tutor</i> (DVD) by Ted Bentley. Only the following videos from <i>The Video Tutor</i> are relevant for students preparing for the Basic MPT:</p> <p>1.1.1 What is Algebra? 1.1.2 Basic Algebraic Properties 1.1.3 Rational Number Arithmetic 1.3.1 Math Models</p> <p><i>The Video Tutor Guide</i> by Ted Bentley. This is a companion workbook for <i>The Video Tutor</i>. It contains examples for students to work through to accompany each video segment of <i>The Video Tutor</i>.</p>	<p>Library A/V Department (QA 154.2 M858 1992)</p> <p>Library A/V Department (QA 154.2 M858 1992)</p> <p>Capilano University Bookstore</p>

**Topic Overview****Sample Questions****Answers****1. Arithmetic**

$16\overline{)340} =$

21.25

**2. Order of operations**

$15 - 6 \times 2 + 5 =$

8

**3. Signed number arithmetic**

$-8 - (4 - 7) + 2 =$

-3

**4. Common fractions**

$6 \cdot \frac{4}{27} =$

 $\frac{8}{9}$ 

$4\frac{2}{3} - 3\frac{2}{9} =$

 $\frac{13}{9}$ 

$3\frac{3}{4} \div 1\frac{7}{8} =$

2

**5. Decimal fractions**Convert to a decimal:  $\frac{21}{16} =$ 

1.3125

**6. Percentage fractions**

3 is what percentage of 24?

12.5%

Convert to a decimal: 7.5%

0.075

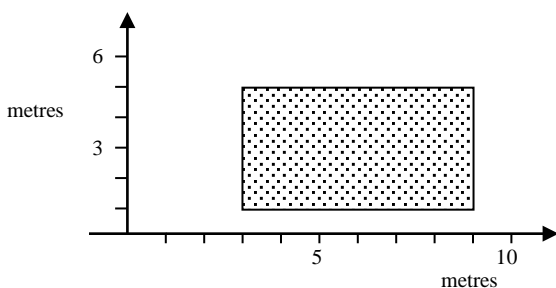
**7. Basic algebra**If  $x = 9$  and  $y = -2$  determine the value of  $4\sqrt{x} - y^3$ .

20

Solve for  $x$ :  $3(5 - x) = 2x + 7$  $x = 1.6$ Solve for  $x$ :  $a(b - x) = cx + d$  $x = \frac{ab - d}{a + c}$ **8. Basic applications**

A jacket is reduced from \$125 to \$100. What percentage reduction is this?

20%

A car rental company charges \$30 plus 5 cents per kilometre driven. Write an expression for the cost  $c$  (in dollars) for a car driven  $d$  kilometres. $c = 30 + 0.05d$ 

On a test 24 students passed and 8 failed. What percentage failed?

25%

What is the area of the shaded rectangle?

24 m<sup>2</sup>

What is the perimeter of the shaded rectangle?

20 m