

## EXAM REVIEW ANSWERS

### CHAPTERS 1 AND 2

#### Trigonometry

1. 14.6cm      2. a. 14.2      b. 2.3      3. 9.5m      4.  $56.3^\circ$       5.  $51.3^\circ$
6. a.  $\sin 35^\circ = 0.5736$        $\cos 35^\circ = 0.8192$        $\tan 35^\circ = 0.7002$   
b.  $\sin 110^\circ = 0.9397$        $\cos 110^\circ = -0.3420$        $\tan 110^\circ = -2.7475$
7. a.  $49.9^\circ$       b.  $29.3^\circ$       8. Answers in textbook      9 a.  $55.4^\circ$       b.  $130.9^\circ$       10. 10.6m
11. 118.4m

Measurement: 1. Perimeter 15.1m      Area  $12.5 \text{ m}^2$

2.  $198.41 \text{ m}^3$       3.  $116.54 \text{ m}^2$       4. a. F      b. T      c. T      d. F      e. T      f. T

### CHAPTERS 3 AND 4

1. d      2. a      3. a      4. c      5. c      6. b      7. a      8. 89
9. Pictures (see full answer sheet)      10. b. see graph in class.      c.  $y = 5.89x + 55.3$   
d.  $r = 0.711338\dots$  (remember to turn Diagnostic ON under catalogue on the graphing calculator before performing the linear regression.)
11. Varies -- describing how to pick a sample, conduct a survey and pull together the results.

### CHAPTERS 5 AND 6

1. a. linear      b. quadratic      2. Quadratic is best (through more dots/closer to dots)  $y = 0.125x^2 + 0.625x + 3.1$       If you used Exponential  $y = 3.383(1.2)^x$       3. 2<sup>nd</sup> table, second differences the same.

Equations: 4. a. Quadratic      b. Linear      c. Quadratic      d. Exponential      e. Linear      f. Quadratic

5. a iv, b v, c ii, d iii, e i, f iv      6. a.  $a^5$       b.  $x^3$       c.  $b^8$       d. 1      e.  $\frac{x^2y^5}{z^2}$   
f.  $x^2y^9z^6$       g.  $\frac{1}{a^6}$       h. 1      7. a. 25      b.  $\frac{1}{27}$       c.  $\frac{1}{16}$       d. -27      e.  $\frac{1}{4}$       f. -36      g.  $\frac{1}{32}$   
h. -16      8. a. 3      b. 1      c. 1      d. 1      9. a.  $x = \frac{y+5}{3}$       b.  $h = \frac{2V}{b}$       c.  $x = \sqrt{\frac{y+2}{3}}$       d.  $b = \sqrt{\frac{3V}{h}}$   
e.  $V = \sqrt[3]{\frac{3V}{4\pi}}$       f.  $\cos A = \frac{b^2c^2 - a^2}{2bc}$       10.  $523.6 \text{ cm}^3$

CHAPTERS 7 AND 8

1. OPTION A: PMT \$477.99 interest 2943.52 Reason: Less Interest      OPTION B: PMT \$414.19 interest \$4851.40 Reason: Cheaper payment      2. a. borrowed \$280 000  
b. \$1412.11      3. FV: \$10 496.77 yes over \$9 000      4. Varies  
5.

Definition	# of times per year
Annually	1
Semi-annually	2
Monthly	12
Bi-monthly	6
Semi-monthly	24
Weekly	52
Bi-weekly	26
quarterly	4