

**Self-directed Clarifying Activity – Assessment Type 1: Skills and Applications Tasks – Percentage Assessment**

1. Use the annotated performance standards and student work sample to compare your interpretation of the performance standards and recalibrate your assessment decision (if necessary).

# Assessment Decision = D

Please see annotations below

	Knowledge and Understanding	Application	Communication
<b>D</b>	<p>Location of some mathematical information in a narrow range of highly familiar everyday contexts.</p> <p>Some knowledge and understanding of a narrow range of numeracy skills and strategies required to complete a task or tasks in an everyday context.</p>	<p>Gathering and representation of data with some accuracy to attempt to find solutions to questions set in everyday contexts.</p> <p>Selection and application of one or more mathematical processes to find solutions to some questions set in highly familiar contexts.</p> <p>Use of one or more technologies to access or communicate information.</p> <p>Undertaking of some individual work and a limited contribution to group work in carrying out tasks.</p>	<p>Use of a narrow range of notation and other basic representations to communicate simple mathematical processes, in mostly simplistic language.</p>

## Percentage Assessment

- Skills Test  
NAME: \_\_\_\_\_**S1 - Understanding Percent**

1. What do the following Percentages equal?

a) 49%

$$\frac{49}{100} = 0.49$$

b) 8%

$$\frac{8}{100} = 0.08$$

c) 25.6%

$$\frac{25.6}{100} = 0.256$$

d) 451%

$$\frac{451}{100} = 4.51$$

e) 0.08%

$$\frac{0.08}{100} = 0.0008$$

**S2 - Converting Percent**

2. Convert the following TO a percent.

a) 7.52

$$752\%$$

b) 0.09

$$9\%$$

c)  $\frac{5}{8}$ 

$$62.5\%$$

d)  $\frac{341}{205}$ 

$$166.3\%$$

e)  $\frac{14}{647}$ 

$$2.16\%$$

**S3 - Calculating Percent**

3. Calculate the following. Show working.

a) 80% of 54

$$\frac{80}{100} \times 54$$

$$43.2$$

b) 17.5% of 685 m

$$\frac{17.5}{100} \times 685$$

$$119.9 \text{ m}$$

c) 81.3% of 2'678 people

$$\frac{81.3}{100} \times 2678$$

$$= 2177.2 \text{ people}$$

d) 435% of \$24.00

$$\frac{435}{100} \times 24$$

$$= 104.40$$

e) 0.8% of \$2'985.46

$$\frac{0.8}{100} \times 2985.46$$

$$= 23.88$$

**S4 - Changing Percent**

4. Calculate the following. Show working.

a) 35% increase of 385

$$100 + 35 = 135$$

$$\frac{135}{100} \times 385$$

$$519.75$$

b) 6% decrease of 756 metres

$$\frac{100}{100} \times 756 \quad \frac{94}{100} \times 756$$

$$= 756 - 42.36 = 713.64 \text{ m}$$

c) 24.8% increase \$762.39

$$\frac{124.8}{100} \times \$762.39$$

$$= 16.37 \text{ X}$$

Routine  
questions.

**Percentage Assessment**

**- Application Task**

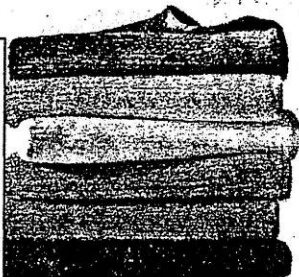
NAME: \_\_\_\_\_

**REMEMBER to show ALL your calculations.**

**1. Sales and Discount**

**30% off**

towels by and



were \$34.95  
**NOW**  
**???**

a) What is the Discount on the Towels? **Show working.**

$$100 - 30 = 70 \div 100 \times 34.95$$

$$= 24.465$$

$$= \$24.47$$

b) What is the Sale Price of the Towels?

24.47

**2. Profit and Loss.**

At a Garage Sale, Frank bought an old cupboard for \$25. If he does it up then sells it for **80% more**, does he make a Profit or a Loss? Profit

b) How much is it? **Show working.**

$$25 \times 1.8 = 45$$

c) What did he sell it for? **Show working.**

**3. Tax and Superannuation**

Rita worked for two weeks at \$745 per week.

a) How much did she earn? **Show working.**

$$745 \times 2 = 1490$$

b) If her tax rate was 42%, how much tax did she have to pay? **Show working.**

$$\frac{58}{100} \times 42 = 24.36$$

c) How much pay did she actually receive?

$$1490 - 24.36 = 1465.64$$

d) If her employer pays superannuation of 7% on Earnings, how much is this?

$$\frac{107}{100} \times 1490 = 1594.3$$

e) If her employer also pays Workcover at the rate of 0.7%, how much is this?

**4. Wages and Commission**

Which is the better Pay Deal on sales worth \$318,500?

- A. Salary of \$1145 plus 0.68% commission
- OR
- B. 1.02% commission only.

**Remember to show working.**

$$\frac{68}{100} \times 318500 = 216580$$

$$\frac{1.02}{100} \times 318500 = 3248.70$$

Which is the better deal - A or B? A

**Knowledge and Understanding**  
Can locate some mathematical information in a narrow range of highly familiar everyday contexts.

**Knowledge and Understanding**  
Some knowledge and understanding of a narrow range of numeracy skills and strategies required to complete a task or tasks in an everyday context.

**Application**  
Selects and applies one or more mathematical processes to find solutions to questions in highly familiar contexts.

**Communication**  
Simple processes. Simplistic language.

## 5. Changing Value

Work out the value of a \$312'000 house after 5 years if it appreciates by 7.2% each year?

a) What is the Percentage Multiplier?

312,000

b) Draw up and complete an Appreciation Table in the space below.

c) How much value did the house gain over the 5 years? **Show working.**

## 6. Loans and Interest

a) Calculate the Interest on a \$17'500 loan borrowed at an Interest Rate of 7.95%pa for 7 years. **Show working.**

b) What is the Total Amount that has to be paid back? **Show working.**

c) How many months does this loan run for? **Show working.**

d) What are the monthly repayments on this loan? **Show working.**

**7. Challenge 1.** The label on a 650 mL Fruit Drink says that 5% is Fruit Concentrate and the rest is water. How many mL of water are in the Fruit Drink?

**8. Challenge 2.** The sign in a Bulk Buy Store shows the following Discounts

<b>Bulk Buy Discount Deals</b>		
BUY 0-10	BUY 11-25	BUY 25+
PAY	GET	GET
NORMAL	10%	12%
PRICE	DISCOUNT	DISCOUNT

a) How much would you pay if you bought 32 items for \$4.45 each?

b) How much change out of \$200 cash?