

Name Student A  
 Date 5-3-10  
 Block B3

Percent Assessment  
 MYP Level 2

Choose 5 of the following problems to solve. You may choose one other for extra credit.

1. Refer to the table shown. Which student had the greatest percent of increase in test score from pretest to posttest? Justify your answer.

Student Name	Pretest Score	Posttest Score
Alex	75	83
Emily	84	89
Zachary	83	91
Karli	88	95

\* Percents are rounded to the nearest 100th

Alex had the largest increase.

Alex:  $75 - 83$

$$\frac{8}{75} = \frac{x}{100}$$

$$800 = 75x$$

$$x = 10.66\% \text{ increase}$$

Emily:  $84 - 89$

$$\frac{5}{84} = \frac{x}{100}$$

$$500 = 84x$$

$$x = 5.95\% \text{ increase}$$

Zachary:  $83 - 91$

$$\frac{8}{83} = \frac{x}{100}$$

$$800 = 83x$$

$$x = 9.64\% \text{ increase}$$

Karli:  $88 - 95$

$$\frac{7}{88} = \frac{x}{100}$$

$$700 = 88x$$

$$x = 7.95\% \text{ increase}$$

work:

2. A piece of candy originally worth 1¢ is currently worth 10,000 percent of its 1900 price. How much does it cost today?

100% of 1¢ is 2¢

work:

$$10000 \div 100 = 100$$

$$\begin{array}{r} 2¢ \\ \times 100 \\ \hline 200¢ \end{array}$$

It would cost 200¢ now.

3. In the store where you work, customers receive 10% off sale items and 8% off cash purchases. When you figure the price of a sale item paid with cash, which discount should you take first? Or should you just add the percents to figure the discount? Which way will give customers a greater benefit? Which method is better? Explain your reasoning.

The better method would be to add up the percents. So, in this case the total of percentage taken off would be 18%. This would save time and give the right amount of discount.

4. Hiking boots that cost \$150 a pair are reduced by 40% for a special weekend sale. By what percent must the special sales price be increased to bring the price back to \$150?

work:  $\$150 \times .40 = \$60$   
 $\$150 - \$60 = \$90$

You would have to increase the sale price by 150%.

Name Student B  
 Date 4-30  
 Block 43

Percent Assessment  
 MYP Level 2

Choose 5 of the following problems to solve. You may choose one other for extra credit.

1. Refer to the table shown. Which student had the greatest percent of increase in test score from pretest to posttest? Justify your answer.

Student Name	Pretest Score	Posttest Score
Alex	75	83
Emily	84	89
Zachary	83	91
Karli	88	95

$\frac{8}{75} \rightarrow 10.6\%$  ✓  
 $\frac{5}{84} \rightarrow 6\%$  ✓  
 $\frac{8}{83} \rightarrow 10\%$  ✓  
 $\frac{7}{88} \rightarrow 8\%$  ✓

Alex had had the greatest percent of increase from the pretest to the posttest because he had the highest percent of increase ( $\frac{8}{75}$ ).

2. A piece of candy originally worth 1¢ is currently worth 10,000 percent of its 1900 price. How much does it cost today?

$$1¢ \cdot 10,000 = 10,000¢ = \$100.00$$

Therefore cost \$100 on the current market.

3. In the store where you work, customers receive 10% off sale items and 8% off cash purchases. When you figure the price of a sale item paid with cash, which discount should you take first? Or should you just add the percents to figure the discount? Which way will give customers a greater benefit? Which method is better? Explain your reasoning.

4. Hiking boots that cost \$150 a pair are reduced by 40% for a special weekend sale. By what percent must the special sales price be increased to bring the price back to \$150?

$$150 - 40\% = 90$$

$$\frac{90}{90} - \frac{x}{100} = \frac{90}{60} = \frac{2}{3}$$



Name Student C  
 Date 4-30-10  
 Block #3

Percent Assessment  
 MYP Level 2

Choose 5 of the following problems to solve. You may choose one other for extra credit.

- ① Refer to the table shown. Which student had the greatest percent of increase in test score from pretest to posttest? Justify your answer.

Student Name	Pretest Score	Posttest Score
Alex	75	83
Emily	84	89
Zachary	83	91
Karli	88	95

Zachary had the greatest percent of increase.

Alex:  $83 - 75 = 8$ ,  $8/75 = 10.66666667 \times 10 = 10.7$

Emily:  $89 - 84 = 5$ ,  $5/84 = 5.95238095 \times 10 = .6$

Zachary:  $91 - 83 = 8$ ,  $8/83 = 9.63855422 \times 10 = .1$

Karli:  $95 - 88 = 7$ ,  $7/88 = 7.95454545 \times 10 = .8$

~~10,000~~  
~~10,000~~  
~~10,000~~  
~~10,000~~  
~~10,000~~

A piece of candy originally worth 1¢ is currently worth 10,000 percent of its 1900 price. How much does it cost today?

~~\$1.00~~

- ② In the store where you work, customers receive 10% off sale items and 8% off cash purchases. When you figure the price of a sale item paid with cash, which discount should you take first? Or should you just add the percents to figure the discount? Which way will give customers a greater benefit? Which method is better? Explain your reasoning.

~~100~~  
~~1.5150.0~~

Customers would get a greater benefit if you took the sale discount first. If you added the percents, they would merge and could create a smaller percent.

- ③ Hiking boots that cost \$150 a pair are reduced by 40% for a special weekend sale. By what percent must the special sales price be increased to bring the price back to \$150?

25%

Name Student D  
 Date 4/30/10  
 Block 3

Percent Assessment  
 MYP Level 2

Choose 5 of the following problems to solve. You may choose one other for extra credit.

1. Refer to the table shown. Which student had the greatest percent of increase in test score from pretest to posttest? Justify your answer.

Student Name	Pretest Score	Posttest Score
Alex	75	83
Emily	84	89
Zachary	83	91
Karli	88	95

Zachary had the greatest percent of increase on his test. It was a 9.6% increase.

(-5)

Alex  $\frac{83-75}{75} = \frac{8}{75} = 5.3\%$  increase

Emily  $\frac{89-84}{84} = \frac{5}{84} = 6\%$  increase

Zachary  $\frac{91-83}{83} = \frac{8}{83} = 9.6\%$  increase

Karli  $\frac{95-88}{88} = \frac{7}{88} = 8\%$  increase

$\frac{95}{88} = 1.08$   
 $\frac{91}{83} = 1.09$

2. A piece of candy originally worth 1¢ is currently worth 10,000 percent of its 1900 price. How much does it cost today?

$\frac{10000}{100} = 100$

$\frac{1¢}{100} = \frac{x}{10000}$   
 $x = 19$  cents

The candy is now worth 19 cents.

3. In the store where you work, customers receive 10% off sale items and 8% off cash purchases. When you figure the price of a sale item paid with cash, which discount should you take first? Or should you just add the percents to figure the discount? Which way will give customers a greater benefit? Which method is better? Explain your reasoning.

TO give the customer the best benefit, you should just add the 2 percents together.

$\frac{18}{100} = 18\%$

26%

$\frac{60}{375}$

4. Hiking boots that cost \$150 a pair are reduced by 40% for a special weekend sale. By what percent must the special sales price be increased to bring the price back to \$150?

The special sales price must be \$375.00. It increases by 150%.

$\frac{x}{150} = \frac{40}{100}$   
 $x = 60$  dollars

$\frac{40}{100} = \frac{60}{x}$   
 $x = 375$

$\frac{75}{100} = 75\%$

375

KEVIN #2, #4, #10 INTERVIEW paper & RETURN TO ME.

Name Student E

Percent Assessment  
MYP Level 2

Date 5-3-10  
Block B-3

Choose 5 of the following problems to solve. You may choose one other for extra credit.

1. Refer to the table shown. Which student had the greatest percent of increase in test score from pretest to posttest? Justify your answer.

Alex: 75 → 83

$$\frac{8}{75} \times \frac{\%}{100} = \frac{800}{75} = 10.7\% \text{ increase}$$

Student Name	Pretest Score	Posttest Score
Alex	75	83
Emily	84	89
Zachary	83	91
Karli	88	95

Emily: 84 → 89

$$\frac{5}{84} \times \frac{\%}{100} = \frac{500}{84} = 5.9\% \text{ increase}$$

Karli: 88 → 95

$$\frac{7}{88} \times \frac{\%}{100} = \frac{700}{88} = 8\% \text{ increase}$$

Alex had the highest increase of 10.7%.

Zachary: 83 → 91

$$\frac{8}{83} \times \frac{\%}{100} = \frac{800}{83} = 9.6\% \text{ increase}$$

work

2. A piece of candy originally worth 1¢ is currently worth 10,000 percent of its 1900 price. How much does it cost today?

Original = 1¢

$$\text{Currently} = \frac{1900}{10,000} = .19$$

Currently Today the candy is 19¢.

3. In the store where you work, customers receive 10% off sale items and 8% off cash purchases. When you figure the price of a sale item paid with cash, which discount should you take first? Or should you just add the percents to figure the discount? Which way will give customers a greater benefit? Which method is better? Explain your reasoning.

4. Hiking boots that cost \$150 a pair are reduced by 40% for a special weekend sale. By what percent must the special sales price be increased to bring the price back to \$150?

$$150 \times .4 = \$60.00$$

60 → 150

$$\frac{90}{60} \times \frac{\%}{100} = \frac{9000}{60} = 150\% \text{ increase}$$

To bring the price back to \$150.00 then we need to increase 60 by 150%.

Name Student F  
 Date 4/30/10  
 Block AB

Percent Assessment  
 MYP Level 2

Choose 5 of the following problems to solve. You may choose one other for extra credit.

1. Refer to the table shown. Which student had the greatest percent of increase in test score from pretest to posttest? Justify your answer.

Student Name	Pretest Score	Posttest Score
Alex	75	83
Emily	84	89
Zachary	83	91
Karli	88	95

Alex had the greatest percent increase. This is because all the other students had lower percent increases than him. Alex had a 10.7% increase and all the other increases were less.

Alex:  $\frac{x}{100} = \frac{8}{75}$   
 $800 = 75x$   
 $x = 10.7$

Emily:  $\frac{x}{100} = \frac{5}{84}$   
 $84x = 500$   
 $x = 6$

Zach:  $\frac{x}{100} = \frac{8}{83}$   
 $800 = 83x$   
 $x = 9.6$

Karli:  $\frac{x}{100} = \frac{7}{88}$   
 $88x = 700$   
 $x = 8$

Alex 10.7% increase Emily 6% increase Zach 9.6% increase Karli 8% inc

2. A piece of candy originally worth 1¢ is currently worth 10,000 percent of its 1900 price. How much does it cost today?

$\frac{10,000}{100} = \frac{x}{0.01}$  ✓  
 $100 = 100x \quad 0.01$   
 $1 = x \quad +1$   
 $2.01$

The candy is now \$2.01.

3. In the store where you work, customers receive 10% off sale items and 8% off cash purchases. When you figure the price of a sale item paid with cash, which discount should you take first? Or should you just add the percents to figure the discount? Which way will give customers a greater benefit? Which method is better? Explain your reasoning.

4. Hiking boots that cost \$150 a pair are reduced by 40% for a special weekend sale. By what percent must the special sales price be increased to bring the price back to \$150?

ex

$150 \times 0.4 = 60$  ✓  
 you need to increase + by 60%.

$\frac{x}{100} = \frac{90}{150}$   
 $150x = 9000$   
 $100$

redo #17 on notebook paper & return w/quiz.

extra credit ~ 10

Name Student G  
 Date 5/4/10  
 Block 83

Percent Assessment  
 MYP Level 2

Choose 5 of the following problems to solve. You may choose one other for extra credit.

1. Refer to the table shown. Which student had the greatest percent of increase in test score from pretest to posttest? Justify your answer.

Student Name	Pretest Score	Posttest Score
Alex	75	83
Emily	84	89
Zachary	83	91
Karli	88	95

*Zachary had the greatest % of increase*

*Alex*  
 $\frac{x}{100} = \frac{8}{83}$

*Emily*  
 $\frac{x}{100} = \frac{5}{84}$

*Zachary*  
 $\frac{x}{100} = \frac{8}{83}$

*9.64%*

*4.50%*

*9.80%*

*Karli*  
 $\frac{x}{100} = \frac{7}{88}$   
*7.97%*

2. A piece of candy originally worth 1¢ is currently worth 10,000 percent of its 1900 price. How much does it cost today?

$\frac{10000}{100} = \frac{x}{1}$

$10,000 \div 100 = 100$

*\* \$1.00*

3. In the store where you work, customers receive 10% off sale items and 8% off cash purchases. When you figure the price of a sale item paid with cash, which discount should you take first? Or should you just add the percents to figure the discount? Which way will give customers a greater benefit? Which method is better? Explain your reasoning.

*8%*  
 $\frac{8}{100} = \frac{x}{100}$

$\frac{10}{100} = \frac{x}{100}$

$\frac{10}{100} = \frac{x}{92}$

*added*  
 $18\% = 18$   
 $\frac{18}{100} = \frac{x}{100}$   
 $100 - 18 = 82$   
 $\$82.00$

$\frac{10}{100} = \frac{x}{100}$   
 $10,100 - 10 = 100$   
 $\frac{8}{100} = \frac{x}{90}$   
 $90 - 7.26 = 82.80$   
 $\$82.80$

*\$100.00*  
 It doesn't matter which discount you take first, the end result is the same. If you add the percents, you would have 18% off. You should add it you are looking for a better benefit. 10% & 8% are different things.

Hiking boots that cost \$150 a pair are reduced by 40% for a special weekend sale. By what percent must the special sales price be increased to bring the price back to \$150?

$\frac{40}{100} = \frac{x}{150}$

$\frac{40}{100} = \frac{x}{150}$

$100 - 40 = 60$

*\* 60%*

$\frac{x}{100} = \frac{60}{100}$