

## Greiðslurokning 9.fl. mai 2014

1a

Tilboð 1

$$3 * 6962 = 20886 \text{ kr}$$

$$2 * 5920 = \underline{11840 \text{ kr}}$$

**Tilsamans 32726 kr**

Tilboð 2

$$3 * 7160 = 21480$$

$$2 * 5070 = \underline{10140}$$

**Tilsamans 31620 kr**

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1b

$$\text{Munur: } 32726 - 31620 = \mathbf{1106 \text{ kr}}$$

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1c

$$\text{Munur í \%} \quad \frac{1106 * 100}{31620} \approx \mathbf{3,5 \%}$$

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1d

$$\text{Prísur í lágárstíð : } 31620 * 0,7 = \mathbf{22134 \text{ kr}}$$

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2a

1. árið  $78,2 * 1,018 = 79,6076$
2. árið  $79,6076 * 1,018 = 81,0405$
3. árið  $81,0405 * 1,018 = 82,499$
4. árið  $82,499 * 1,018 = 83,98$  mió

Íbúgvar í 2014 **uml. 83,9 mió**

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2b

$$\text{Fólk undir 15 ár: } 78,2 * 0,34 = \mathbf{26,588 \text{ mió}}$$

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2c

$$1001450 \text{ km}^2 = 78200000 \text{ fólk}$$

$$1 \text{ km}^2 = \frac{78200000}{1001450} \approx 78,1$$

**Fólkatættleikin er 78,1**

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3a

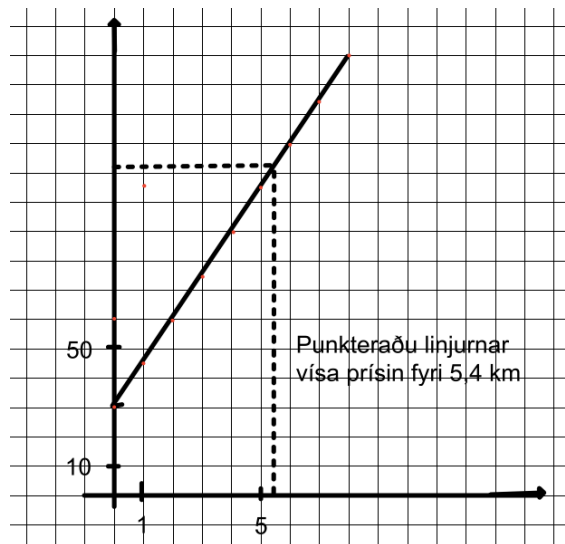
$$y = ax \pm b$$

y = kostnaður                      b = byrjunarkostnaður      x = prísur pr. km

$$y = 15x + 30$$

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3b



3c

Prísurin fyri 5,4 km er 111 kr

Antin kanst tú lesa av í talvuni omanfyri ella rokna út  $30 + 5,4 * 15 =$

**111 kr**

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3d

$$\text{Ferð} = \frac{\text{Strekkið}}{\text{tíð}}$$

$$9 \text{ min} = \frac{9}{60} = 0,15 \text{ tímar}$$

$$\text{Ferð} = \frac{5,4}{0,15} = \mathbf{36 \text{ km/t}}$$

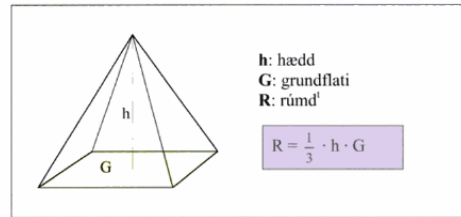
# Greiðslurokning 9.fl. mai 2014

4a

$$\text{Rúmd} = \frac{1}{3} \cdot 138,8 \cdot 230,4 \cdot 230,4$$

$$\text{Rúmd} = 2456027,136 \text{ m}^3$$

*Pyramida*



4b

Longdin á s

$$s^2 = 115,2^2 + 138,8^2$$

$$s^2 = 13271,04 + 19265,44$$

$$s^2 = 32536,48$$

$$s = \sqrt{32536,48}$$

$$s \approx 180,4 \text{ m}$$

4c

$$\text{Allur yvirflatin} = 4 \cdot 230,4 \cdot 180,4 \cdot 0,5 = 83128,32 \text{ m}^2$$

4d

$$\frac{138,8}{\sin C} = \frac{180,4}{\sin 90}$$

$$\sin C \cdot 180,4 = 138,8 \cdot \sin 90$$

$$\sin C = \frac{138,8 \cdot \sin 90}{180,4}$$

$$\sin C \approx 0,7694$$

$$C = 50,3^\circ$$

4e

Steinar brúktir til pyramiduna :

$$\frac{\text{vekt á pyramiduni}}{\text{vekt á hvörjum steini}}$$

$$\frac{6380611}{2,5} = 2552244,4 \text{ steinar}$$

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4f

Rúmdin á pyramiduni er 2456027,136 m<sup>3</sup>

2/3 av pyramiduni er sandsteinur (1/3 er rúm og gongir)

$$\text{Rúmd á sandsteini: } \frac{2456027,136 \cdot 2}{3} = \mathbf{1637351,424 \text{ m}^3}$$

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4g

Vekt = rúmd \* evnisnøgd

$$\text{Evnisnøgd} = \frac{\text{vekt}}{\text{rúmd}}$$

$$\text{Evnisnøgd} = \frac{6380611}{1637351,424} \approx 3,9$$

**Evnisnøgdin hjá sandssteini er 3,9**

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5a

$$100 \text{ USD} = 546,79 \text{ kr}$$

$$7024 \text{ USD} = \frac{546,79 \cdot 7024}{100} \approx \mathbf{38406,53 \text{ kr}}$$

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5b

$$79,41 \text{ kr} = 100 \text{ EGP}$$

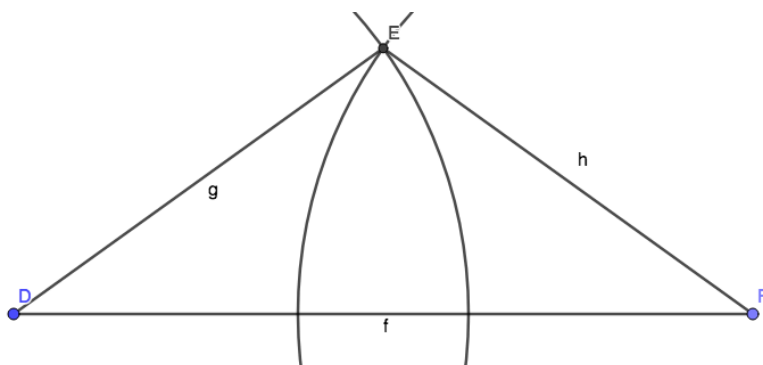
$$38406,53 \text{ kr} = \frac{100 \cdot 38406,53}{79,41} \approx \mathbf{48364,85 \text{ EGP}}$$

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6a

**Vinkul D og F eru 36°**

**Vinkul E er 108°**





## Greiðslurokning 9.fl. mai 2014

algebra

$$\frac{1}{2}x + 2 = -x + 8$$

$$\frac{1}{2}x + x = 8 - 2$$

$$1,5x = 6$$

$$x = \frac{6}{1,5}$$

$$x = 4$$

$$y = -4 + 8$$

$$y = 4$$

$$(x,y) = (4,4)$$

ella

ritloysn (sí mynd)

Linjurnar skera hvør aðra í (4,4) t.v.s., at

$$x = 4 \text{ og } y = 4$$

