



# Numbers: Animal Maths

NAME: .....

CLASS: .....

DATE: .....



## Basic

1) Select five different single digits. Using all five digits only once, arrange them to make the following (if possible):

- a) largest possible number
- b) smallest possible number
- c) number nearest to 75,000
- d) largest even number
- e) smallest even number
- f) largest odd number
- g) smallest odd number
- h) largest square number

2) Place the following numbers in order of size from the smallest to the largest:

- a) 145; 32; 124; 654; 987
- b) 92; 21; 654; 999; 1025; 325
- c) 2145; 3254; 3214; 245; 145
- d) 214; 19,012; 2457; 3215; 10,125
- e) 99,999; 9999; 100,002; 5457; 325

3) Give the next three terms in the following number sequences:

- a) 2, 4, 7, 11, 16,
- b) 1, 4, 9, 16, 25,
- c) 2, 4, 8, 16, 32,
- d) 800, 400, 200, 100,
- e) 4, 12, 36, 108,
- f) 1, 1, 2, 3, 5, 8,



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## Basic

4) Give the next three temperatures in the following sequences:

a)  $3^{\circ}$ ,  $2^{\circ}$ ,  $1^{\circ}$ ,  $0^{\circ}$ ,  $-1^{\circ}$ ,

b)  $6^{\circ}$ ,  $4^{\circ}$ ,  $2^{\circ}$ ,  $0^{\circ}$ ,  $-2^{\circ}$ ,

c)  $5^{\circ}$ ,  $3^{\circ}$ ,  $1^{\circ}$ ,  $-1^{\circ}$ ,  $-3^{\circ}$ ,

d)  $-4^{\circ}$ ,  $-2^{\circ}$ ,  $0^{\circ}$ ,  $2^{\circ}$ ,  $4^{\circ}$ ,

5) Put these temperatures in order, **coldest** first:

a)  $-6^{\circ}\text{C}$ ,  $5^{\circ}\text{C}$ ,  $-8^{\circ}\text{C}$ ,  $0^{\circ}\text{C}$ ,  $1^{\circ}\text{C}$

b)  $-1^{\circ}\text{C}$ ,  $-2^{\circ}\text{C}$ ,  $3^{\circ}\text{C}$ ,  $4^{\circ}\text{C}$ ,  $10^{\circ}\text{C}$

c)  $-5^{\circ}\text{C}$ ,  $3^{\circ}\text{C}$ ,  $-7^{\circ}\text{C}$ ,  $6^{\circ}\text{C}$ ,  $-10^{\circ}\text{C}$

d)  $8^{\circ}\text{C}$ ,  $-2^{\circ}\text{C}$ ,  $-6^{\circ}\text{C}$ ,  $9^{\circ}\text{C}$ ,  $8^{\circ}\text{C}$

6) Put these temperatures in order, **warmest** first:

a)  $4^{\circ}\text{C}$ ,  $-1^{\circ}\text{C}$ ,  $9^{\circ}\text{C}$ ,  $-5^{\circ}\text{C}$ ,  $11^{\circ}\text{C}$

b)  $3^{\circ}\text{C}$ ,  $-10^{\circ}\text{C}$ ,  $8^{\circ}\text{C}$ ,  $-4^{\circ}\text{C}$ ,  $2^{\circ}\text{C}$

c)  $9^{\circ}\text{C}$ ,  $-4^{\circ}\text{C}$ ,  $-3^{\circ}\text{C}$ ,  $6^{\circ}\text{C}$ ,  $-12^{\circ}\text{C}$

d)  $7^{\circ}\text{C}$ ,  $4^{\circ}\text{C}$ ,  $-2^{\circ}\text{C}$ ,  $12^{\circ}\text{C}$ ,  $0^{\circ}\text{C}$

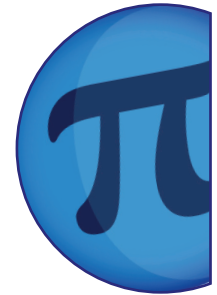


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## Core

1) Put these temperatures in order, **coldest** first:

a)  $-6^{\circ}\text{C}$ ,  $5^{\circ}\text{C}$ ,  $-8^{\circ}\text{C}$ ,  $0^{\circ}\text{C}$ ,  $1^{\circ}\text{C}$

b)  $-1^{\circ}\text{C}$ ,  $-2^{\circ}\text{C}$ ,  $3^{\circ}\text{C}$ ,  $4^{\circ}\text{C}$ ,  $10^{\circ}\text{C}$

c)  $-5^{\circ}\text{C}$ ,  $3^{\circ}\text{C}$ ,  $-7^{\circ}\text{C}$ ,  $6^{\circ}\text{C}$ ,  $-10^{\circ}\text{C}$

d)  $8^{\circ}\text{C}$ ,  $-2^{\circ}\text{C}$ ,  $-6^{\circ}\text{C}$ ,  $9^{\circ}\text{C}$ ,  $8^{\circ}\text{C}$

2) Put these temperatures in order, **warmest** first:

a)  $4^{\circ}\text{C}$ ,  $-1^{\circ}\text{C}$ ,  $9^{\circ}\text{C}$ ,  $-5^{\circ}\text{C}$ ,  $11^{\circ}\text{C}$

b)  $3^{\circ}\text{C}$ ,  $-10^{\circ}\text{C}$ ,  $8^{\circ}\text{C}$ ,  $-4^{\circ}\text{C}$ ,  $2^{\circ}\text{C}$

c)  $9^{\circ}\text{C}$ ,  $-4^{\circ}\text{C}$ ,  $-3^{\circ}\text{C}$ ,  $6^{\circ}\text{C}$ ,  $-12^{\circ}\text{C}$

d)  $7^{\circ}\text{C}$ ,  $4^{\circ}\text{C}$ ,  $-2^{\circ}\text{C}$ ,  $12^{\circ}\text{C}$ ,  $0^{\circ}\text{C}$

3) What will the temperature be if it:

a) starts at  $-4^{\circ}$  and rises  $7^{\circ}$ ?

b) starts at  $-8^{\circ}$  and rises  $8^{\circ}$ ?

c) starts at  $5^{\circ}$  and falls  $9^{\circ}$ ?

d) starts at  $-2^{\circ}$  and falls  $3^{\circ}$ ?

e) starts at  $-6^{\circ}$  and rises  $4^{\circ}$ ?

f) starts at  $0^{\circ}$  and falls  $4^{\circ}$ ?



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## Core

4) Which of these statements is true and which is false?

a)  $-8^{\circ}\text{C} < -3^{\circ}\text{C}$

b)  $-4^{\circ}\text{C} > -4^{\circ}\text{C}$

c)  $6^{\circ}\text{C} > -4^{\circ}\text{C}$

d)  $-30^{\circ}\text{C} < -10^{\circ}\text{C}$

e)  $-100^{\circ}\text{C} > -40^{\circ}\text{C}$

f)  $25^{\circ}\text{C} < 20^{\circ}\text{C}$

5) Calculate the answers to the following:

a)  $-7 + 4$

b)  $-3 + 7$

c)  $-4 + 8$

d)  $-7 + 10$

e)  $-1 + 4$

f)  $3 - 5$

g)  $-2 - 9$

h)  $12 - 13$

6) a) The temperature at midnight is  $-3^{\circ}\text{C}$ . The temperature at noon is  $10^{\circ}\text{C}$ . By how many degrees does the temperature rise?

b) The temperature at noon is  $7^{\circ}\text{C}$ . The temperature at midnight is  $-8^{\circ}\text{C}$ . By how many degrees does the temperature fall?

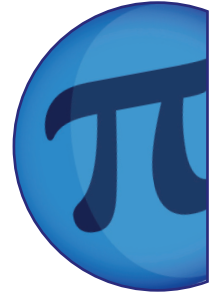


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## Advanced

1) Which of these statements is true and which is false?

a)  $-8^{\circ}\text{C} < -3^{\circ}\text{C}$

b)  $-4^{\circ}\text{C} > -4^{\circ}\text{C}$

c)  $6^{\circ}\text{C} > -4^{\circ}\text{C}$

d)  $-30^{\circ}\text{C} < -10^{\circ}\text{C}$

e)  $-100^{\circ}\text{C} > -40^{\circ}\text{C}$

f)  $25^{\circ}\text{C} < 20^{\circ}\text{C}$

2) Calculate the answers to the following:

a)  $-7 + 4$

b)  $-3 + 7$

c)  $-4 + 8$

d)  $-7 + 10$

e)  $-1 + 4$

f)  $3 - 5$

g)  $-2 - 9$

h)  $12 - 13$

3) a) The temperature at midnight is  $-3^{\circ}\text{C}$ . The temperature at noon is  $10^{\circ}\text{C}$ . By how many degrees does the temperature rise?

b) The temperature at noon is  $7^{\circ}\text{C}$ . The temperature at midnight is  $-8^{\circ}\text{C}$ . By how many degrees does the temperature fall?



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## Advanced

4) Calculate the answers to the following:

a)  $-3 + -5$

b)  $-7 + -1$

c)  $10 + -6$

d)  $2 + -3$

e)  $-10 + -1$

f)  $6 + -6$

g)  $15 + -1$

h)  $7 + -10$

5) Calculate the answers to the following:

a)  $-7 - -3$

b)  $-3 - -4$

c)  $9 - -2$

d)  $10 - -7$

e)  $-2 - -10$

f)  $-4 - -5$

g)  $0 - -2$

h)  $5 - -3$



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## ANSWERS

### Basic

- 2) a) 32; 124; 145; 654; 987                      b) 21; 92; 325; 654; 999; 1025  
c) 145; 245; 2145; 3214; 3254                      d) 214; 2457; 3215; 10,125; 19,012  
e) 325; 5457; 9999; 99,999; 100,002
- 3) a) 22, 29, 37                      b) 36, 49, 64                      c) 64, 128, 256  
d) 50, 25, 12.5                      e) 324, 972, 2916                      f) 13, 21, 34
- 4) a)  $-2^\circ$ ,  $-3^\circ$ ,  $-4^\circ$                       b)  $-4^\circ$ ,  $-6^\circ$ ,  $-8^\circ$   
c)  $-5^\circ$ ,  $-7^\circ$ ,  $-9^\circ$                       d)  $6^\circ$ ,  $8^\circ$ ,  $10^\circ$
- 5) a)  $-8^\circ$ ,  $-6^\circ$ ,  $0^\circ$ ,  $1^\circ$ ,  $5^\circ$                       b)  $-2^\circ$ ,  $-1^\circ$ ,  $3^\circ$ ,  $4^\circ$ ,  $10^\circ$   
c)  $-10^\circ$ ,  $-7^\circ$ ,  $-5^\circ$ ,  $3^\circ$ ,  $6^\circ$                       d)  $-6^\circ$ ,  $-2^\circ$ ,  $8^\circ$ ,  $8^\circ$ ,  $9^\circ$
- 6) a)  $11^\circ$ ,  $9^\circ$ ,  $4^\circ$ ,  $-1^\circ$ ,  $-5^\circ$                       b)  $8^\circ$ ,  $3^\circ$ ,  $2^\circ$ ,  $-4^\circ$ ,  $-10^\circ$   
c)  $9^\circ$ ,  $6^\circ$ ,  $-3^\circ$ ,  $-4^\circ$ ,  $-12^\circ$                       d)  $12^\circ$ ,  $7^\circ$ ,  $4^\circ$ ,  $0^\circ$ ,  $-2^\circ$

### Core

- 1) a)  $-8^\circ$ ,  $-6^\circ$ ,  $0^\circ$ ,  $1^\circ$ ,  $5^\circ$                       b)  $-2^\circ$ ,  $-1^\circ$ ,  $3^\circ$ ,  $4^\circ$ ,  $10^\circ$   
c)  $-10^\circ$ ,  $-7^\circ$ ,  $-5^\circ$ ,  $3^\circ$ ,  $6^\circ$                       d)  $-6^\circ$ ,  $-2^\circ$ ,  $8^\circ$ ,  $8^\circ$ ,  $9^\circ$
- 2) a)  $11^\circ$ ,  $9^\circ$ ,  $4^\circ$ ,  $-1^\circ$ ,  $-5^\circ$                       b)  $8^\circ$ ,  $3^\circ$ ,  $2^\circ$ ,  $-4^\circ$ ,  $-10^\circ$   
c)  $9^\circ$ ,  $6^\circ$ ,  $-3^\circ$ ,  $-4^\circ$ ,  $-12^\circ$                       d)  $12^\circ$ ,  $7^\circ$ ,  $4^\circ$ ,  $0^\circ$ ,  $-2^\circ$
- 3) a) 3                      b) 0                      c) -4                      d) -5                      e) -2                      f) -4
- 4) a) True                      b) False                      c) True                      d) True                      e) False                      f) False
- 5) a) -3                      b) 4                      c) 4                      d) 3                      e) 3                      f) -2                      g) -11                      h) -1
- 6) a)  $13^\circ$                       b)  $15^\circ$

### Advanced

- 1) a) True                      b) False                      c) True                      d) True                      e) False                      f) False
- 2) a) -3                      b) 4                      c) 4                      d) 3                      e) 3                      f) -2                      g) -11                      h) -1
- 3) a)  $13^\circ$                       b)  $15^\circ$
- 4) a) -8                      b) -8                      c) 4                      d) -1                      e) -11                      f) 0                      g) 14                      h) -3
- 5) a) -4                      b) 1                      c) 11                      d) 17                      e) 8                      f) 1                      g) 2                      h) 8