

Math 2303
Chapter 1 – Test 1
Review

1. Write the Hindu-Arabic number 1429 as

- A. An Egyptian number
- B. A Roman number
- C. An Ionic Greek number
- D. A traditional Chinese number
- E. A Babylonian number
- F. A Mayan number

2. Write the following numbers in Hindu-Arabic numerals:

A. The Egyptian number



B. The Roman number

VICMLXXXIX

C. The Ionic Greek number

β' σιε

D. The Chinese number:

一
千
一
百
五
十
九

E. The Babylonian number

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F. The Mayan number:

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3. Write the following numbers in other bases as their equivalent representation in base 10:

A. 2045_6

B. 10111001_2

C. $24A_{16}$

4. Write the number 693 in:

A. Base 6

B. Base 8

C. Base 2

5. Add in the given base:

A. $353_8 + 244_8$

B. $1121_5 + 243_5$

C. $1011_2 + 1101_2$

D. $423_6 + 151_6$

6. Subtract in the given base:

A. $154_7 - 25_7$

B. $432_5 - 124_5$

7. Convert the following metric units to the units indicated:

A. $300 \text{ m} = \underline{\hspace{2cm}} \text{ km}$

B. $0.004 \text{ hm} = \underline{\hspace{2cm}} \text{ cm}$

C. $40.55 \text{ mm} = \underline{\hspace{2cm}} \text{ cm}$

D. $0.245 \text{ kg} = \underline{\hspace{2cm}} \text{ g}$

E. $51.44 \text{ mg} = \underline{\hspace{2cm}} \text{ dg}$

F. $0.02 \text{ g} = \underline{\hspace{2cm}} \text{ cg}$

G. $4002.2 \text{ mg} = \underline{\hspace{2cm}} \text{ g}$

H. $1,004,000 \text{ liters} = \underline{\hspace{2cm}} \text{ kl}$

I. $2 \text{ liters} = \underline{\hspace{2cm}} \text{ cl}$

J. $4500 \text{ ml} = \underline{\hspace{2cm}} \text{ liters}$

8. Convert the following Fahrenheit temperatures to temperatures in degrees Celsius.

- A. $87^{\circ}F$
- B. $-20^{\circ}F$
- C. $225^{\circ}F$
- D. $10^{\circ}F$

9. Convert the following Celsius temperatures to temperatures in degrees Fahrenheit.

- A. $15^{\circ}C$
- B. $85^{\circ}C$
- C. $-20^{\circ}C$
- D. $200^{\circ}C$

10. Answer the following questions about the size of metric units.

A. The diameter of a dime is approximately

- (a) 2 mm
- (b) 20 dm
- (c) 2 m
- (d) 2 cm
- (e) 0.02 km.

B. The length of a football field is approximately

- (a) 9 m
- (b) 90 m
- (c) 900 cm
- (d) 900 mm
- (e) 0.9 km.

C. The mass of a healthy newborn child could be approximately

- (a) 3.5 g
- (b) 3.5 kg
- (c) 0.35 kg
- (d) 35 g
- (e) 3500 mg

D. The mass of a raisin is approximately

- (a) 1 g
- (b) 1 mg
- (c) 1 kg
- (d) 100 g
- (e) 0.01 g

11. Convert the following units:

A. $5.6 \text{ ft} = \underline{\hspace{2cm}} \text{ m}$

B. $25 \text{ in} = \underline{\hspace{2cm}} \text{ cm}$

C. $24 \text{ mm} = \underline{\hspace{2cm}} \text{ in}$

D. $40 \text{ km} = \underline{\hspace{2cm}} \text{ miles}$

E. $58 \text{ lb} = \underline{\hspace{2cm}} \text{ kg}$

F. $352 \text{ g} = \underline{\hspace{2cm}} \text{ lb}$

G. $5.55 \text{ g} = \underline{\hspace{2cm}} \text{ ounces}$

H. $0.125 \text{ ounces} = \underline{\hspace{2cm}} \text{ mg}$

I. $4 \text{ gallons} = \underline{\hspace{2cm}} \text{ liters}$

J. $45 \text{ ml} = \underline{\hspace{2cm}} \text{ teaspoons}$

K. $530 \text{ gallons} = \underline{\hspace{2cm}} \text{ kl}$

L. $35 \text{ ft}^3 = \underline{\hspace{2cm}} \text{ m}^3$

M. $450 \text{ cm}^2 = \underline{\hspace{2cm}} \text{ in}^2$

12. A rectangular field measures 25 m wide by 1.0 hm long.

- A. Find the area of the field in square meters.
- B. Find the area of the field in square feet.
- C. Find the area of the field in square hectometers.

13. A rectangular box is 2 ft wide by 2 ft long by 9 in high. Find the volume of the box:

- A. In cubic inches.
- B. In cubic feet.
- C. In cubic meters.